A STUDY ON

VADHA KARAPPAN

(ECZEMA)

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PALAYAMKOTTAI, TIRUNELVELI

Certificate

This is to certify that **Dr. P. SRIDEVI (III Year)**

has attended the CME on

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31.10.12

Dr. S. KANIRAJA, M.D(s)
Head of the Department
Department of PG Sirappu Maruthuvam,
Govt. Siddha Medical College,
Palayamkottai

Dr. S. MOHAN, M.D(s)
Principal i/c
Govt. Siddha Medical College,
Palayamkottai

The Tamil Nadu Dr. M.G.R. Medical University

69, Anna Salai, Guindy, Chennai-600 032

This Certificate is awarded to Dr P. SRIDEVI

for participating as a ~~Resource Person~~ / Delegate in the VI Workshop on

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Dr. MAYILVAHANAN NATARAJAN
M.S.Orth. M.Ch.Orth. (L'pool) Ph.D. D.Sc. F.R.C.S. D.Sc. (Hon)^3
VICE CHANCELLOR

Dr. SUDHA SESHAYYAN, M.S.
REGISTRAR (FAC)

Dr. N. KABILAN, M.D. (Siddha)
READER, DEPT. OF SIDDHA

INTRODUCTION

Medicine is the art of healing. It is the applied science for the diagnosis, treatment and prevention of disease. Siddha system of medicine is ahead of other system of medicine as this says that medicine is one that prevents death.

"மறுப்ப துடல்நோய் மருந்தென லாகும்
மறுப்ப துளநோய் மருந்தென சாலும்
மறுப்ப தினிநோய் வாரா திருக்க
மறுப்பது சாவை மருந்தென லாமே"

.. திருமூலர் ..

This poem implies that a medicine should prevent diseases of body, mind and prevent the diseases and finally death. This is made possible by Siddhars who are great scientists with the help of Kayakalpam.

Siddha system of medicine has a unique theory of etiology, pathology, diagnosis and treatment of diseases. These are based on **'Tridosha theory'** that includes Vadham, Pitham and Kabam and **'Panchabootham theory'** that include the five elements.

"மிகினும் குறையினும் நோய்செய்யும் நூலோர்
வளிமுதலா எண்ணிய மூன்று".

These doshas can be vitiated by many causes. Medicine is aimed to cure all the aspects of the disease.

"நோய்நாடி நோய்முதல் நாடி அது தணிக்கும்
வாய்நாடி வாய்ப்பச் செயல்"

--திருவள்ளுவர்

According to this, one should diagnose a disease and its basic etiology with careful history taking and examination and this cause should be treated.

Diseases are classified as 4448 by Siddhars. In this Karappan is explained by 'Yugi Vaithiya Chinthamani' as 7 types. In this "Vadha karappan" is taken for study.

Vadha karappan can be correlated with ‘Eczema’ in modern medicine. Karappan is one the most common dermatological disease. This accounts for a great deal of misery, suffering and economic loss in the society. Moreover this causes psychological disturbances and has remissions. Patients who suffer from atopy in childhood suffer with eczema in their adult life.

The studies revealed that prevalence of eczema is 115.56 per 1000 and this increases year by year. Drugs prescribed for eczema like immune suppressants and anti-histamine further cause side effects.

So the author have selected the disease “Vatha Karappan” for her dissertation work to study the incidence, etiology, aggravating factors, course of disease, prognosis, diet and preventive aspects.The work is carried out OPD and IPD of Government Siddha Medical College and Hospital, Palayamkottai. The drugs selected are

1. Internal medicine

Amirtha Kandhi Kukkil Valladhi – 500mg (tds)

Ref – Agathiyar Vaidhiya Valladhi 600

2. External medicine

Sivappu ennai

Ref – Sirappu Maruthuram

AIM AND OBJECTIVES

AIM

To evaluate the therapeutic efficacy of AMIRTHA KANDHI KUKKIL VALLADHI"(Internal) and "SIVAPPU ENNAI"(External) in "VADHA KARAPPAN".

OBJECTIVES

- To arrive at a clear cut idea about incidence of disease in people of different age, life style, occupation, socio-economical status, family history and seasonal variations.
- To expose the diagnostic methods of Siddha with the aid of Siddha principles.
- To know how the disease alters the normal conditions under the topics of Mukkurtram, Poripulangal, Envagai thervugal, Ezhu udar kattugal, Neerkuri and Neikuri.
- To know the extent of correlation of etiology, classification, signs and symptoms of Vadha Karappan in Siddha aspect with Eczema in modern medicine aspect.
- To evaluate the bio-chemical, analysis, pharmacological studies of the trail drugs.
- To use the modern diagnostic parameters to confirm and follow the progress of the disease.
- To insist dietary restriction and yoga along with medicine to achieve best results.

REVIEW OF LITERATURE

SIDDHA ASPECTS

In Siddha System of medicine, Pancha Bhootham plays a vital role in disease pathogenesis and also in treatment. The skin is a part of one of the panchabhoothams- prithivi (Earth).It is mentioned as

"சேரப்பா சடமாச்சு மண்ணின் கூறு
செறிமயிர்தோல் என்பிறைச்சி நரம்பைந் தாகும்"

சதகநாடி

Based on Panchabhoothams, skin a combination of Mann + Theyuand the properties of Theyu are sleep, thrist,appetide, fear and unifacation that may affect the skin.

Tactile sensation of skin is due to vayu that is explained in Thirmoolar naadi as

"வளப்பங்கேள் பூமி வசிக்கும் நாசியில்
களப்பமாம் வன்னிதானும் கண்ணினிலே
அளப்பாமா மப்போவடங்கிடும் நாவினில்
பளப்பநல் வாயுவும் பரிசிக்கு மேங்குமே"

Vadham is a combination of vayu+ veli. So any derangement of vayu affects vadham. Moreover in**Theraiyar pinimudhar kaaranam** it is explained as

"வாதமலாது மேனிகெடாது"

Kabam is the predominant uyirthadu that is affected in Vadha Karappan .Later this affects pitham and vatham.

In Siddha System,etiology,pathology and treatment of Vadha karappan are explained in detail.

நோய் இயல்:

தோலில்திமிர், குரு, புண், தடிப்பு, ஆகிய குறிகுணங்களை உடைய படைகளை உண்டாக்கி, அவ்விடங்களில் வீக்கம், கொப்புளங்கள் கண்டு அல்லது செதில் போன்று தோல் சுரசுரப்பாகி தோலின் இயற்கை நிறத்தை வேறுபடுத்தி சிலவேளை வெடிப்புண்டாக்கி நீர் கசிதல் ஆகிய குறிகுணங்களைக் காட்டும் தோற்பிணியை கரப்பான் அல்லது கரப்பன் என்று கூறுவர்.

நோய் வரும் வழி:(Aetiology)

"ஏழான கரப்பானின் உற்பத்தி கேளாய்
ஏற்றமாய் மாமிசங்கள் புசிக்கையாலும்
கூழான கம்புதினை வரகு சாமை
பொடிதான் கிழங்குவகை யருந்தலாலும்,
பாழான பெண் மாயை தன்னிற் சிக்கும்
பாங்கான விரகத்தால் முயற்சியாலும்
தாழான பண்டங்கள் சமைத்துத் தின்னல்
தாக்குமே கரப்பான் தன் சாயல் தானே
சாயலாய்த் தனக்குத் தான் மூத்த பெண்ணைத்
தாவினோர் தாழ்ச்சியாங்சாதி தன்னில்
காயலாய்க் கலந்துண்டோர் கலகம் செய்தோர்
கற்புடைய மங்கையரைக் கருதினோர்கள்
வாயலாய் வாழ் மரத்தை வெட்டினோர்கள்
மருத்துவர்கள் வண்ணர் நாவிதர்கள் கூலிக்
கூயலாய்க் கொடா தோர்கள் குருநிந்தித்த
கொடும்பாவி கரப்பானிற் குறிக் கொள்வாரே".

-யூகி வைத்திய சிந்தாமணி
(கரப்பான் ரோக நிதானம்)

- Excessive intake of meat, Pennisetum, Seteria, Paspalam and panicum tuber causes eczema.
- Antisocial activities - Affects mind and skin causing karappan

"பெருகுஞ் சோள மிறுங்கும் பெருங்கம்பு
வரகு காருடன் வாழையின் காயோடு
உரைகொள் பாகல் தெளிற்று மீன் உண்டிடில்
விரிவ தாய்க்கரப் பானுமி குந்ததே"

சித்த மருத்துவ சிறப்பு

- This poem specifies the dietary relations with the karappan disease.
- Bitter gourd, ragi, maize, unripe banana, fish aggravates the disease.

"சங்கையில் விஷ கரப்பான் வருமாறேது
சாரமுடன் கிருமி விழுந்தன்மையேது
உட்டிணமே அதிகம் வருமிந்திரிய போகத்தா
லுழறுதுருகி யத்தியிலேவேவு கொண்டு
நட்டணமாய் வெந்த தொரு மச்சை தன்னில்
நாட்டமிட்ட கிருமியணுகும் போது
மட்டுடனே கிருமியெல்லாம் பறந்தங்கேறி
வகையுடனே மாங்கிஷத்தைத் துளைத்து மேவும்"

"திட்டமுடன் விட கரப்பான் பறந்து மேலே
தினவுடனே பரபரத்துச் சொறியுண்டாமே
பயல்மொழியிர் தேகத்தில் கிருமிதானே
பரந்துஏவி குட்டம்போல் புள்ளிகாணும்
மயலதுவுங் கிருமியுந்தான் நடந்து புக்கில்
மேனியது சரசரென வெடித்துப் புண்ணாற்
கயல் பெருகும் சூழல் மடவீர் சொல்லக் கேளிர்
கரகரத்துச் சொறி பெருகுங் கரப்பான் தானே"

குரு நாடி நூல்

Excessive sexual indulgence aggravates Azhal thathu which inturn affects the Kozhuppu and Thasai of the sevan udal kattugal. The micro organisms enter through these affected thathus and cause the disease Karappan.

"வாதபித்தங் கபமிவை மூன்றவர்
றேது வால்வெளி வால்மிடி யாவினர்
கோதை யாரடிய பார்வையர் வாற்குளிர்
பேத நிரிவை யாலுன பேசுகேள்
வேகக் காற்றதினர் பனை வெல்லத்தால்
பாக மிக்கலான் மேதிப் பாவெய்யலால்
தாகமானி வருக்க திசார்தலால்
போக வாழை வழுதலை முள்ளிக்காய்
காயும் பல்லிடத் தாற்சுரத் தாற்களில்
எயும் வண்டொலி யால்வருமே துவெளி

குடி நல்லறிவான எருவினார்

யன மானகரப்பான் வகைகளே

பரராச சேகரம் - சிரரோக பகுதி

- Living in torrid climate and cold weather.
- Drinking contaminated water
- Airborne infection
- Excessive intake of palm jaggery and brinjals, plantain etc .,
- Poisonous bites are the factors.

நோய் எண்: (Classification)

"எண்பது கரப்பான் தன்னை யியம்பிடுமாறு கேளீர்

நண்பிடு வாதம் பித்தம் நலம்கெட்டுத் தானம் வீங்கும்

புண்படும் கரங்கள் சந்து புலைந்திடல் கடுத்து நோகும்

வன்மையுடன் வெடித்து சூலை வருவது ரணமீதென்னே"

அகத்தியர் ரண நூல்

It was mentioned that Karappan was classified into 80 types

"விளம்பிடு வாதநோவு எண்பது நாலுமிகக்

உள்ளங்கள் சன்னி முப்பத்தோங்குடல் வாயுமெட்டு

கழங்கமு முப்பத்தெழு கரப்பனு மறுபத்தாறு

தனங்கொள்ளபிருதி நாலு சாற்றுளை குறவையெட்ட".

அகத்தியர் 2000

Karappan are 66 innumbers . But the names were not given

"ஆமென்ற கரப்பான் தான் ஏழுவிதமாகும்

அடங்காத வாதத்தின் கரப்பானோடு

காமென்ற கண்டமாங் கரப்பானாகும்

கருகிய தோர் வறட்சியாங் கரப்பானோடு

தேமென்ற திமிர்வாத கரப்பான் நாலும்

சிரசினிலே பெருங் கபாலக் கரப்பான்

கோமென்ற பித்தமாங் கரப்பானோடு

பெரிய சேட்டுமக் கரப்பான் பெயர்தானே".

-யூகி வைத்திய சிந்தாமணி

1 வாத கரப்பான்

2 பித்த கரப்பான்

3. கப கரப்பான்

4. திமிர்வாத கரப்பான்

5. கண்ட கரப்பான்

6 கபாலக் கரப்பான்

7. வறட்சி கரப்பான்

"செப்புவாதக்கரப்பன் சேர்வரட்சிகரப்பன்
வெப்புறும் பெருங்கரப்பன் விரற்றிமிர்வாதமென்னும்
கப்புறுகரப்பனோடு கபாலத்திற்சேர்கரப்பன்
தப்புறுவிஷபாகத்திற் சார்ந்திருடுங்கரப்பானாமே.
கரப்புறுடைகரப்பன் கரந்து கெண்டைக்கரப்பன்
துரப்புறுசொறிகரப்பன் தூங்கிடுகரப்பானோடு
நிரப்பவீங்குக் கரப்பானோடு அடர்காணாக்கடிக்கரப்பன்
அரிப்புறுகரப்பானோடு அடர்காணாக்கடிக்கரப்பன்
கடித்திடுசெங்கரப்பன் கருதுமூலக்கரப்பன்
அடுத்தசுகுணிகரப்பன் அழற்றுகொள்ளிக்கரப்பன்
துடித்தகொப்புளக்கரப்பன் தோன்றுகண்டக்கரப்பன்
நெடுத்தற்கரப்பனோடு நீள்பொத்ததிக்கரப்பானாமே
ஆகுங்காதிற்கரப்ப னாமிருத்து மூன்றில்
வாகுறுகுணங்களோடு மருவிடுமருந்துசிங்கைச்
சேகராரியகோனான செகராசசேகரன்றன்
ஓகைசேர்ந்திடுவதற்கா யுலகினர்க்குரைத்தாமே".

-செகராசசேகர வைத்தியம்

1 வாதகரப்பான்

2 வறட்சி கரப்பான்

3 பெருங்கரப்பான்

4 திமிர்வாத கரப்பான்

5. கபாலக் கரப்பான்

6. விஷபாக கரப்பான்

7. புடை கரப்பான்

13 தூங்குகரப்பான்

14 வீங்குக் கரப்பான்

15. வெடி கரப்பான்

16 அரி கரப்பான்

17 காணாக்கடி கரப்பான்

18 செங்கரப்பான்

19. மூல கரப்பான்

8. கெண்டைக் கரப்பான்
9. சொறி கரப்பான்
10. கொப்புளக் கரப்பான்
11. கற் கரப்பான்
12. காதிற் கரப்பான்
20. அசுகுணி கரப்பான்
21. கொள்ளி கரப்பான்
22 கண்ட கரப்பான்
23. பொதி கரப்பான்

"படுவன் முப்பத்திரண்டு பருவொரு நாற்பத்தொன்று
முடுகிடும் விஷபமாறு முற்று வோபுசி மூன்றுந்
திடுக்கிடும் பீலி மூன்று சிரசினிற் சிவந்தி சொல்லீல்
கடுகிடுமை பத்தாறு கரப்பான் மென்பத்தைந்து"

-குருநாடி சாஸ்திர நூல்

Karappan wasclassified into 85 types

"நாளடா நாற்பது நாலு நூறு
நயமுடனே நாற்பத்து எட்டுரோகும்
பாரப்பா வாதமது எண்பத்து நாலு
பருக்கவே பித்தமது நாற்பத்து எட்டு
தாரப்பா சேத்துமங்கள் தொண்ணூற்றாறு
பீலியுடனுறு வசிய மஞ்சதாகும்
பொரிகரப்பான் தொன்னூறு கெண்டைபத்து".

-இரத்தின சுருக்க நாடி நூல்

Karappan was classified into 90 types

"செங்கரப்பான் அனல் கரப்பான் தானும் மண்டைச்
சிரங்குபண்ணும் அரிக்கரப்பான் பொரிகரப்பான்
அங்கமதி லெழுகரப்பான் தானுமிக்க
அளராம்உதி ரக்கரப்பான் கட்டியோடு
பொங்கமாய் வீங்கி கரப்பா னுந்தான்
புகலரிய சட்டைதடி வெடிக ரப்பான்
சிங்கமுக எரிக்கரப்பான் வாத பித்தச்
சேத்மதோட கரப்பான் பதினெட்டாமே"

-பதிணென் சித்தர் பாலவாகட திரட்டு

1. வாத கரப்பான்
2. பித்த கரப்பான்
3. கப கரப்பான்
4. அரி கரப்பான்
5. ஓடு கரப்பான்
6. சூலை கரப்பான்
7. வெடி கரப்பான்
8. மண்டைக் கரப்பான்
9. சட்டைக் கரப்பான்
10. ஊது கரப்பான்
11. கருங்கரப்பான்
12. பொரிக்கரப்பான்
13. கொள்ளி கரப்பான்
14. தோட கரப்பான்
15. வாலை கரப்பான்
16. வறள் கரப்பான்
17. வீங்கு கரப்பான்
18. செங் கரப்பான்

மேற்கூறிய வகைகள் பாலர்களில் காணப்படுகிறது.

கரப்பான் நோயின் பொதுக்குறிகுணங்கள்

(General Signs and Symptoms)

"எண்பது கரப்பான் தன்மையியம்பிடு மாறு கேளீர்
நண்பிடும் வாதம் பித்தம் நலம்கெட்டுத்தானம் வீங்கும்
புண்பிடுங் கரப்பான் சந்து புலைந்திடல் கடுத்து நோகும்
வன்மையுடன் வெடித்துச் சூலைவருவது ரணமீதென்னே"
"உனைஞ்சுமே வயிறுதான் சீதங்காணும்
உஷ்ணமாய் மூத்திரந்தா முருங்கி வீழும்
அனைஞ்சுமே யங்கமெல்லாம் சொரியுண்டாம்
அழலாக வெதும்பலாய்க் கைக்காலோயும்
புகைஞ்சமேனி லிங்கத்திற் புண்போலு ருக்கிப்
பொடிப்பொடியாய் சுண்ணாம்புக் கற்போல வீழும்
களைஞ்சுமே நீரோடு மலமுங்சிக்கும்
கசியுமேகரப்பானாம்".

-அகத்தியர் விரணநூல்

- Swellingall over the body
- Pain in the joints of the body
- Body temperature raises
- Appearance of papules, vesicles whichburstleads to ulcer formation
- Oozing from the lesion
- Itching all over the body
- Scanty micturition and Constipation.

VATHA KARAPPAN

The signs and symptoms of Vatha Karappan

"கொள்ளவே உடம்பெல்லாம் வெதும்பாய் நொந்து

குடைந்துமே மிகச் சுரந்து வீக்கமாகும்

விள்ளவே தேகமெல்லாம் புண்போல் நொந்து

வெடித்துமே புண்ணாகும் விரல்கள் சந்து

முள்ளவே முடங்கியே நரம்பு காணும்

மோழிகள் பக்கமிக்க இடமிக உலர்ந்து

மள்ளவே மேனியது வரண்டு காணும்

வாதமாங் கரப்பான்றன் வன்மைதானே"

-யூகி வைத்திய சிந்தாமணி

ELUCIDATION

வாதகரப்பான் - கருங்கரப்பான் ___ eczema which is black

வாதம் - உந்தியின் கீழ் பிறந்து உடம்பு முழுவதிலும் பரவி சுவாசம், பசி, தாகம் முதலியவைகளுக்கு ஆதாரமாக இருந்து பல விகாரங்களை ஏற்படுத்தி கொண்டிருக்கும்முப்பணிகளில் ஒன்று

-One of the three humours occupying the regionbelow the navel. It is responsible for all movements in the body. It spreads throughout the body and causes respiration, hunger and thirst .

கரப்பான் - சொறி, புண் முதலியவைகளின் வகை

-Namefor any eruption or other skin disease such as rash, eczema

வாதகரப்பான் - வாத குற்றக்கேட்டை முதன்மையாக கொண்ட ஓர் வகை கரப்பான் நோய்

உடம்பெல்லாம்	-	உடம்பு ___ Body
வெதுப்பாய்	-	வெதுப்பு ___ gentle heat
நொந்து	-	பலவீனம் - weakness due to severe pain
குடைந்துமே	-	குடைந்து ___ குடைதல்- feeling of continuousboring pain
முிக	-	excess – more
சுரந்து	-	சுரத்தல், இடைவிடாது சொரிதல், உண்டாதல், ஊறுதல்
வீக்கம்	-	ஊதல் swelling பூரிப்பு
தேகமெல்லாம்	-	உடம்பு - the physical character of body
புண்போல்	-	Pain as in ulcer
வெடித்துமே	-	வெடித்தல் - பிளத்தல் - being split, being cracked
புண்	-	Ulcer
விரல்கள்	-	Fingers

சந்து - மூட்டு (அ) பொருத்து — Joint

பிளப்பு – gap

வெடிப்பு — fissure

முள்ளவே - தடைபடுதல்

முடங்கியே - முடங்கல் - being hindered

நரம்பு - நாடி — artery

காரிரத்த குழல் - Vessel carrying black blood, veinஉடலிலுள்ள குழாய் - any duct in the body

மொழிகள் - மொளி — Joints

மொழு — வீக்கம் - swelling

பக்க மிக்க இடம் - adjacent sides

உலர்ந்து - காய்ந்து, வாடி —dryness

மேனி - உடல் - body

நிறம் -colour

சர்மம் - health skin

வறண்டு - வறட்சி — dryness

வண்மை - அழகு — beauty

- குணம் - Quality , property

According to **Agasthiar**,

"வீங்குங்குத்தி மிகவுழைந்து
விடம் போலுடலந் திமிர்ந்து கொண்டு
அங்கமா புண்ணில் சலம் விழுந்தர்
லதுவுந் திணவு சொறி செய்யில்
நீங்கிச் செல்வே தீராது
நெடுநாட்படவே மசகி நிற்கும்
தேங்கச்சுட்டுப் புகைத்துவிடத்
தீரும் வாத கரப்பானதே"
"நொந்துதான் கணத்துமிக்க
நோவுடைப்புண்கள் தன்னில்

வந்து வல்லாயுதங்கள்
வடு விறத்தைத் திடத்தில்
சந்து தாழ்மொழி பெருந்
தனசவு தானங்காளகிற்
வந்துதான் தொடுக்குஞ்சேதி
வாதமாங் கரப்பானாமே".

-அகத்தியர் 2000

- Swelling all over the body
- Pain in the body
- Numbness
- Itching over the affected area
- Oozing from the crushed vesicles
- Ulcers formation
- General debility

"உடம்பெல்லாம் வெதும்பிநொந்து உளைந்துகால் சந்துகைக
ளிடங்களிற்சுரந்துவீங்கி யிருந்துபின்னுவாதியாகி
முடங்கியேவரண்டு தோன்றி முற்றியே வெடித்துப் புண்ணாம்
இடங்கொடாக்கரப்பன்வாத குணமிதென்றியம்பலாமே"
"சந்துதாள் மொழிபொருத்துத் தானங்களுந்துவீங்கி
வந்துதான் புண்போற்காயம் வருந்ததியேயிருந்துவாடி
நொந்துதான் கனத்துவற்றி நோவுடன் சொறியுண்டாகும்
இந்த நோய் தானும் வாத கரப்பனென்றியுண்டாகும்
"இருந்தெழுந்திருக்கும் போது மியற்றுங்கால் கரங்கள் சந்து
வருந்திடத்திமிர்த்து வீங்கி வரண்டிடிவ்வெடித்துப் புண்ணாம்
திருந்தியவங்கந்தானும் செயமறப்பொருமாகில்
வருந்துமிக்குணங்கள் கண்டால் வாதமாங்கரப்பானாமே"
"நொந்துகன்றியதலத்தில் நோவுடைபுண்கள் தன்னில்
வந்துவல்லயாதங்கள் வலுவுறத்தைத் தடத்தில்
சந்துதான் மொழிபொருந்துத்தசைவுங்கள் திலேயாகில்
வந்துதான் தொடுக்கு மெய்யில் வாதகரப்பானென்றறியலாமே".

"கண்ணுந்துரங்கிநடுவுந்தி கனத்துச்சுரந்துவெதும்புமுடல்
நண்ணுந்துடையுங்கனதிமிராய் நைந்தேதலையுங் கிறுகிறுக்கும்
மண்ணிற்பிறந்தோர் தங்களிடம் வந்தேவருந்தமயக்கிடுகில்
எண்ணிவாதகரப்பனென இதுவும் பேலாமென்றார்"

- செகராசசேகர வைத்தியம்

- The body temperature raises
- The lesion start as dry vesicles and later becomes exudative in nature leading to ulcer formation with secondary infection
- The lesion are highly itching in nature
- Pain and swelling in the affected areas of flexures of upper and lower limbs (like wrist, knee, ankle joints, etc.,)
- Difficulty in walking due to swelling in the joints
- In severe cases extreme drowsiness, oedema of lower abdomen are seen.
- The lesion show recurrence and come on and off.

"தெறிக்கும் வீங்குமுடவெங்கு மேதிமிர் கடுப்பதாகியழுந் தேகமேற்
பொறிப் பறந்தெனவே புண்ணாகியதி லேடிவடித்ததிக பொங்கமாய்
முறுக்கியே சுரமாகி நாவது வறண்டு நோயது முதிர்திடில்
வேறிக் கருங்குழலி மாதுவாத கரப்பானெனப் புகல்வர்மேவிட்".

-பதிணென் சித்தர் பாலவாகடா திரட்டு

- Pain and swelling all over body
- The pustules burst to form the ulcers
- Discharge of pus and blood from the ulcers.
- Excessive body heat
- Dryness of the tongue

"சந்து கால்மொளி பொருந்துந் தானங்குளைந்து வீங்கி
வந்துதான் புண்போற் காயும் வருந்தியே யிருந்து வாடும்
நொந்து தானிற்க வொட்ட நோயுடன் வெப்புத் தோன்று
மிந்த நோய் வருகில் வாத கரப்பனென்றறியலாமே"

-அகத்தியர் ஆயுள்வேதம்

- Pain and swelling in the affected upper and lower limbs
- Formation of vesicles, pustules which burst leads to ulcers formation
- Excessive itching and oozing from the lesion
- Body temperature raises
- Pain increases on standing.
- The lesion shows recurrence and come on and off.

அகத்தியர் வாகடம்:

"தலையுங்கனத்து குரல் நொந்து
தறுகா துடம்பு திமிருண்டா
யுனையுங் காலும் வீக்கமுமா
யுளையாதிருக்கு முறுப்புளையும்
வளையும் சரீரம் நோய் மிகுந்து
வலுவை குறைத்து வரண்டேறும்
சுலையுங் செய்யுந்தீராது
கோய் கரப்பானது வாமே
சந்துதான் மொழி பொருத்துத்
தானங்க முளைந்து வீங்கி
வந்துதான் புண்போல் காயம்
மயங்கிடவுலர்ந்தாலும்
நொந்துதான் திரும்போது
நோயுடன் வெப்புத் தோன்றும்
யந்த நோய் வரிலே வாத
கரப்பானென நினைக்கலாமே"

- Head ache
- Hoarseness of voice
- Numbness
- Swelling
- Weakness
- Pain and swelling in the joints

தன்வந்திரி வாகடம்:

"கண்ணுந் துாங்கி நடுஉந்தி
கனத்துச் சுரந்து வெதும்புமுடல்
நன்னுந்துடையுங் கனத்திருக்கும்
சற்றேயுடம்பு கிறுகிறுக்கும்

மண்ணில் பிறந்தார் தங்களுடல்

வந்தே வருந்தி மயங்கிடுகில்

எண்ணில் வாத கரப்பானென

றிளை நோயறிந்து கொள்வீரே"

- ❖ Lethargy, Lassitude
- ❖ Heaviness and swelling of abdomen
- ❖ Pain in the joints
- ❖ Crusted vesicles, resulting in the ulcer.

விஷவாத கரப்பானின் குணம்:

"முகமெலாமழன்று கைகால் வயிறெறிந்தே

யுடம்பெலாஞ்சிறு கடுப்பா முடுக்க நீரும்

புகலரிய மஞ்சலதாய்த் தேகமெங்கும்

பொருந்தியே குளிர்வீசுங் காயும் வீங்கும்

இகலிரண்டாந்தரம் வீங்கியதுவுந்திரு

மினி மூன்றுமுறை வீங்கி சாவாம் வாத

நுவில் கரப்பானெடுதிரடுகி விடுபுகு கைகால்

நொந்து கடுத்திடும் புண்ணாய் நோகுந்தானே

நோக்கியுடன் றலைறில் வலியுண்டாக்கி

நூர்த்து மந்தித்திருக்க வெழும்ப வொட்டா

பார்க்கில் விஷபாகத்தில் வாதம் வந்து

பற்றி பிடிவக் குணமாம் பகரு நோயை"

- ❖ Pain
- ❖ Burning sensation in the hand and feet
- ❖ Yellowishdiscoloration of the skin
- ❖ Chills
- ❖ Fever
- ❖ Swelling
- ❖ Head ache

Prognosis of Karappan

(சாத்தியம் - அசாத்தியம்)

"மூர்க்கமாம் சாத்தியத்தை மொழியக் கேளாய்

மொழிகின்ற வாத கரப்பான் றன்னோடு

ஊர்க்கமாய் பித்த கரப்பானுமா கும்

உயர்கின்ற வறட்சியாங் கபாலக் கரப்பான்

தர்க்கமா யிதுநாலுஞ் சாத்தியமாம்

தளுக்கான திமிர்வாதக் கரப்பான் கண்டம்

நீர்க்கமாஞ் சேட்ப கரப்பான்றன் னோடு

செப்பியதோர் இது மூன்றும்அசாத்தியமாமே"

-யூகி வைத்திய சிந்தாமணி

சாத்தியம்	**அசாத்தியம்**
1.வாத கரப்பான்	1.திமிர்வாத கரப்பான்
2.பித்த கரப்பான்	2.கண்ட கரப்பான்
3.வறட்சி கரப்பான்	3.சேத்தும கரப்பான்
4.கபால கரப்பான்	

DIAGNOSIS

This is based on history and examination by Envagai thervu

Envagaithervu :

"மெய்க்குறி நிறந்தொனி விழி நாவிருமலம் கைக்குறி"

-தேரையர்

"நாடிப் பரிசம் நாநிறம் மொழி விழி

மலம் மூத்திரமிவை மருத்துவராயுதம்"

-நோய் நாடல் நோய் முதல் நாடல் திரட்டு

முதல் பாகம்

"நீடிய விழியினாலும் நின்ற நாக்குறிப்பினாலும்

வாடிய மேனியினாலும் மலமொடு நீரினாலும்

கூடியவியாதி தன்னைச் சுகம் பெற அறிந்து சொல்லலே"

-அகத்தியர் வைத்திய வல்லாதி -600

Thesepoems indicate that Envagai thervu include

1 Naadi (Pulse)

2 Sparisam (Tactile Sensation)

3 Naa (Tongue)

4 Niram (Colour)

5 Mozhi (Speechor voice)

6 Vizhi (Eye)

7 Malam(Faeces)

8 Moothiram (Urine)

1.Naadi (Pulse reading)

This is a very importantdiagnostic criteria

Method of pulse reading

"கரிமுகனடியை வாழ்த்தி
கைதனில் நாடி பார்க்கில்
பெருவிரலங் குலத்தில்
பிடித்தடி நடுவே தொட்டால்
ஒருவிர லோடில் வாதம்
உயர் நடுவிரலிற் பித்தம்
திருவிரல் மூன்றிலோடில்
சிலேத்தும நாடி தானே"

-அகத்தியர் நாடி நூல்

So the pulse is read on index, middle andring finger as vadham, pitham and kabam.Though pulse can be felt in ten places, the commonest place is radialartery.

In patients of vadha karappan pulse is

- Vadhapitham
- Kabam

"தானமுள்ள சேத்துமந்தா னிளகில் வெப்பு
சயமீளை இருமல்மந் தார காசம்
ஈனமுறுஞ் சந்நிவிட தோடம் விக்கல்
இருத்ரோகங் கரப்பான் விரண தோடம்"

2. Sparisam (Tactile sensation)

The roughness,temperature changes, dryness of skin are examined here.

In vadha karappan patients, papules, oozing, lichenification,skin cracks sometimes ulcers are noted.

3. Naa (Tongue)

Any fissures, coated tongue and taste are noted.

In vadha karappan patients tongue is coated in some cases.

4. Niram (Colour)

The colour changes in skin and nail are noted

In vadha karappan, hyperpigmented macules are seen.

5. Mozhi (Speech or voice)

Tone of speech (High or lowpitched sound) is noted

In vadha karappan patients tone is mostly normal.

6. Vizhi (Eye)

The colour and discharge from eye are noted

In vadha karappan patients no changes in eye are found.

7. Malam (Feaces)

In feaces consistency, colour quantity and other discharges like blood or mucus are noted.

In Vadha Karappan patient hard consistency is noted in some patients.

8. Moothiram (Urine)

i) Neerkuri

"வந்த நீர்க்கரி எடை மணம் நுரைஎஞ்சலென்
றைந்தியலுளவை யறைகுது முறையே"

This poem says that urine should be examines for

- ✓ Niram (Colour)
- ✓ Manam (Odour)
- ✓ Edai (Specific gravity)
- ✓ Nurai (Froth)
- ✓ Enjal (Quantity)

ii) Neikuri

"அருந்துமா றிரதமும் அவிரோ தமதாய்
அஃகல் அலர்தல் அகாலவூன் தவிர்ந்தழற்
குற்றள வருந்தி உறங்கி வைகறை
ஆடிக்கலசத் தாவியே காது பெய்

தொருமுகூர்த்தக் கலைக்குட்பட்டு நீரின்
நிறக்குறிநெய்க்குறி நிருமித்தல் கடனே".

Early morning urine is collected in glass containerand is examined within 1 hour 20 minutes for colour and a drop of gingelly oil is dropped and changes in are noted.

The method of spreading may be like snake, ring or pearl indicating vadham, pitham or kabham.

In Vadhakarappan patients, vadham and kabham Neikuri are found.

Other parameters

1. Uyirthadukal
2. Udalkatukal
3. Paruva kaalam

Uyirthadukal

1.Vadham

Also called as Vali or Vaayu divided into ten depending upon location and function.

These ten vaayu support the function of 10 Nadis.

1. **Pranan**
   - ❖ Help in inspiration and expiration
   - ❖ Control digestion

2. Abanan

- ❖ Helps in micturition, defaecation, ejaculation.
- ❖ Assimilation of food
- ❖ Delivery of foetus

3. Viyanan

- ❖ Originate from skin and spreads also over the body
- ❖ Perceive sensation through skin
- ❖ Maintain circulation and performmovements of the body

4.Udhanan

- ❖ Take the essence of digested food tothe tissues
- ❖ Speech production and reflex like cough, sneeze, hiccough and vomiting.

5.Samanan

- ❖ Controls all other vayu
- ❖ Balances six taste, water and food during digestion and helps to reach the targettissues

6.Naagan

- ❖ Intelligence,Learning arts
- ❖ Blinking of eye

7.Koorman

- ❖ Responsible for yawning,closure of mouth and acts on eyes

8.Kirukaran

- ❖ Produces salivary secretion and nasal mucosal secretion
- ❖ Produces hunger,sneezing and coughing

9.Devathathan

- ❖ Responsible for laziness and tiredness on waking up
- ❖ Movements of eyeball
- ❖ Causes one to be enjoyed is fighting quarreling and intense anger

10.Dananjeyan

- ❖ Swells up from the nose to all over the body
- ❖ Gets expelled in three days after death when skull bursts open

In Vadha Karappan Pranan, Abanan, Viyanan, Samanan and Devathathan are affected.

2.Pitham

It is of 5 types

1.Anarpitham

- Located in digestive system and helps in process of digestion.

2.Ranjaka pitham

- Increase blood volume and gives red colour to digested food extract.

3.Saadhaka Pitham

- Helps in performing an act withthe helpof knowledge, intellect and desire

4.Prasakam

- Located in skin
- Give lusture to skin

5.Aalosagam

- Located in eyes
- Perceving the object to the eyes

In some Vadha karappan patients, Anarpitham, Ranjagam, Prasagam, Saathagam are affected.

3.Kabam

It is classified into 5 types

1.Avalambagam

- ❖ Supports heart and resides in lungs
- ❖ Supports all other kabam

2. Kilethagam

- ❖ Located in stomach
- ❖ Makes food and water softening for digestion

3.Pothagam

- ❖ Located in tongue
- ❖ Perceive taste sensation of liquidand solid food.

4.Tharpakam

- ❖ Located in head
- ❖ Cools the eyes

5.Santhikam

- ❖ Located in joints and provides lubrication for all movements

In Vatha Karappan patient Avalambagam is affected

Udal thadukal

1.	Saaram	Helps in rejuvenation of body and mind	Affected
2.	Seneer	Intelligence,power,luster,longevity	Affected

3.	Oon	Provides shape of the body and bone growth	Normal
4.	kozhupu	Provides lubrication	Normal
5.	Enbu	Maintains the framework of the body	Normal
6.	Moolai	Found inside the enbu,softness	Normal
7.	Sukilam/ Suronitham	Helps in producing similar type of offspring	Normal

Paruva Kaalam (Seasonal Variation)

The whole year is divided into six seasons.Dependingupon season, somedisease predominate.

S.No	Kaalam	Kuttram	Suvai
1	Kaar kaalam (Aug 16 – Oct 15)	Vatham ↑↑ Pitham ↑	Enippu Pulippu Uppu
2	Koothir Kaalam (Oct 16-Dec 15)	Vatham ↔ Pitham ↑↑	Enippu Kaippu Thuvarppu
3	Munpani kaalam (Dec 16- Feb 15)	Pitham ↔	Enippu Pulippu Uppu
4.	Pinpani kaalam (Feb 16- Apr 15)	Kabam ↑	Enippu Pulippu Thuvarppu
5.	Elavenil Kaalam (Apr 16- Jun 15)	Kabam ↑↑	Kaarpu Thuvarppu
6.	Muduvenil kaalam (Jun 16- Aug 15)	Vadham ↑ Kabam ↔	Enippu

Thannilai Valarchi ↑

Vetrunilai valarchi ↑↑

Thannelai ↔

Pathology (Mukkutra verupadugal)

"மிகினுங் குறையினும் நோய்செய்யும் நூலோர்
வளிமுதலா எண்ணிய மூன்று"

-திருக்குறள்

This line proves that changes in equilibrium of three humours(vadham pitham, kabam) causes disease.

According to siddha system, diseasesare due to seven bodily humours and the three vital humours.These humours may be altered from its functions.

Failure to digest allergic food stuffs and the disturbed mind results in improper digestion producing MANDHAM .The vaayu samanan joins with mandham resulting in the formation of aamam .This aamam disturbs the functions of Pitham.

Ranjaka pitham and Prasaka pitham functions are distrubed resulting in loss of colour and complexion of the skin .

Rasadhaathu and Raktha dhaathu are affected by pitham and these Dhaathus are responsible for cutaneous manifestations of the skin .The Vaadha humour exhibits the features of the disease through skin .

Thus, kabham being the prime humour for the disease deranges the functions of pitham .This in turn affects Vadham and the disease is exhibited out by Vadham humour .

"வாதமலாது மேனி கெடாது"

- தேரையர்

All the humours are deranged in their functions affecting saaram and seneer.

Further more diet and climate also causes this disease.

Differentialdiagnosis:

1.பித்த கரப்பான்

"தானாகக் கண்துரங்கி நடுவு உந்தி
தளர்ந்துமே உட்கார்ந்து வெதுப்புண்டாகும்

தூணாகக் கிறுகிறுக்கு முடலாஞ் சோரும்
சோரிந்துமே உடம்பு மஞ்சளிக்கும்
வேணாக வண்ணத்தை இறங்கொட்டாது
மிடுக்கான தீபமந் தித்துப் போகும்
போனாக ஊருவது போலக் காணும்
பித்த கரப்பான் குணத்தின் வெற்றியாமே".

- ❖ Drowsiness , Flatulence
- ❖ Fever
- ❖ Itching overthe affected area
- ❖ Yellowdiscoloration of the skin
- ❖ Loss of appetite
- ❖ Lethargy and subjective vertigo

2.சேத்துமக் கரப்பான்

"பெற்றியாய் சரீரமது வெளிறிக் காணும்
பேச்சுத்தான் கம்மலாய் தானிருக்கும்
புத்தியாய் வார்த்தையது பொறுக்கிக் சொல்லும்
பிரபலந்தான் மிகப்பேசி மூச்சுண்டாகும்
எத்தியாய்ச் சகலரையுமேவில் கொள்ளும்
ஈளையிருமல் மூச்சுக் காதிரைச்சல்
முத்தியாய் மோட்ச வழி முறைமுமையாகும்
முதிர் சேட்பக் கரப்பானின் மூர்க்கந்தானே".

- ❖ Pale discoloration of skin
- ❖ Hoarseness of voice
- ❖ Cough, Dyspnoea
- ❖ Tinnitus in the ear

3.கபால கரப்பான்

"காணவே காதெல்லாம் தினவுண்டாகும்
கண் தினவாம் கண்டந்தான் கரகரக்கும்
பூணவேகண்ணீரும் பீளையுண்டாம்
பேச்சுமந்த மூக்கதனில் நீரேபாயும்

தோணவே சிரசுதனிற் சொரிதலுண்டாற்

தும்மல் மிகவுண்டாகுந்துடிக்கும் நெற்றி

ஆணவே அண்ணாக்கி ழலுண்டாகும்

ஆலங்காத கபால கரப்பான்றன் குணமாமே".

- ❖ Itching over the ear lobes and eye lids
- ❖ Hoarseness of voice
- ❖ Excessivelacrimalsecretionand blenorrhoea
- ❖ Sneezing and Rhinitis
- ❖ Pain in the throat
- ❖ Itching over the head

4.கண்டக் கரப்பான்

"தளிராகச் சிரமெங்கு மிகக் கனத்து

தலைகாது மண்டையல்லாந் தடித்து நோகும்

நளிராக வருத்தி விக்கும் நாத்துடிக்கும்

நலமான உடம்புதனிற் சொரியுமாகும்

குளிராகக் குளிர்ந்துமே மயிர்க்கூச்சாகும்

கூப்பிட்டால் மிகப்பயக்குங்கூசுங்கண்தான்

களிராக முட்பொலக் கண்டந்தன்னில்

கரகரக்கும் கண்டமாங் கரப்பானாமே"

- ❖ Headache
- ❖ Swelling and pain in the head and ear
- ❖ Swollen tongue (Macroglossia)
- ❖ Itching all over the body
- ❖ Chillness with shivering
- ❖ Glittering of vision
- ❖ Roughness in the body

5.வறட்சிக் கரப்பான்:

"கண்டமாய் முகவீங்கும் குத்தலுண்டாம்

கனமாக உடம்பெங்கும் மிகவே ஊறும்

துண்டமாயுடல் பதைத்துச் சொரிதலுண்டாம்

சோருமே யெந்நேரம் மயக்கத்தாலே

வண்டகந்தானில்லாம லுடம்பு வற்றும்
மாறுபாடாய் பிதற்றி மறுகும் வார்த்தை
பிண்டமாக்கி டத்துண்டு புலாலே நாறும்
பெருவறட்சி கரப்பான்றன் பேரிதாமே".

- Puffiness of face with pricking pain
- Swelling and pain over the affected area
- Itching all over the body
- Emaciation
- Disoriented words, foul smell in the body

6.திமிர்வாதக் கரப்பான்:

"வன்மையா யுட்கார்ந்து எழும்பும் போது
வருந்தமாய் கால்கைகளி லிடுப்புச் சந்து
திண்மையாய்த் திமிர்த்துமே கரடு கட்டும்
செயலழிந்து வீங்கியே வெடித்துப் புண்ணாகும்
தன்மையாய்ச் சடமெங்கு முதலாகும்
தண்ணீர்தான் மிகத்தடித்துத் தனிச் சூடுண்டாம்
உண்மையாய் மேனியெங்கும் உளைச் சலுண்டாம்
உதறுமே திமிர்வாதக் கரப்பானுமே".

- Pain in the knee, elbow, wrist, hip, shoulder and fingers during sitting and standing
- Swelling of the joints which burst to form ulcers.
- Pain all over the body, Lethargy

TREATMENT

Disease is due to changes in mukkutram affecting body or mind. So treatment is aimed in treating both the causes.

"மறுப்பது உடல்நோய் மருந்தெனலாகும்
மறுப்பது உளநோய் மருந்தென சாலும்
மறுப்பது இனிநோய் வாரா திருக்க
மறுப்பது சாவை மருந்தென லாமே"

-திருமந்திரம்

This poem implies thatprevention of the remission of the disease and even death in termed as medicine. So the treatment includes.

- **Prevention**
- **Treatment**

Prevention

Prevention is very important in this disease as it has remissions.

The patients are advised to follow naal ozhukkam, kala ozhukkam and pinianuga vithi

To overcome depression and anger patients are advised to do pranayama , asana and meditation.

Diet is advised to avoid allergens and diet to avoid mukkutram changes.

"நோய்நாடி நோய்முதல் நாடி அதுதணிக்கும்
வாய்நாடி வாய்ப்பச்செயல்"

-திருக்குறள்

Sothe treatment is aimed at treating the Mukkutram changes.

Line of treatment

- ❖ Purgation
- ❖ Internal medicine
- ❖ External medicine
- ❖ Pathiyam
- ❖ Pranayamam and Asanams

Purgation

The increased kuttram are brought to equilibrium by giving purgation on the first day.

கௌசிகர் குழம்பு-160mg (od at early morning)

Internal medicine

From Second day onwards

Amirtha kanthi valladhi– 500 mg (tds)

Ref: Agathiyar Vaithiyavalladhi 600

External medicine:

Sivappu ennai**(Ref: Sirappu Maruthuvam)**

Diet restrictions

As this disease is mostly due toallergy it is mandatory to givedieteryadvise to patients.For this pathiyam is elaborated specifically to karappan by many siddhars.

சோளம்:Sorghum vulgare

"சோளமெனப் பேர்படைத்த சோறுகளி னாலுடலில்
மீளச் சொறி சிரங்கு விரித்தியதாம் - நாளுங்
கரப்பானும் உண்டாம் கனமருந்தும் பாழாம்
பரப்பனையை கணமாதே பா"

-அகத்தியர்குணவாகடம்

கம்பு-Pennisetum typhoideum

"கம்பு குளிர்ச்சியெனக் காசினியற் சொல்லுவர்க்கான்
பம்பு சொறி சிரங்கை பாலிக்கும் - வெம்பும்
உடலின் கொதிப்பகற்றும் உட்பல முண்டாக்கும்
அடலயிறகண் மாமே யறி."

வரகு– Paspalum scrobiculatum

"எறிகபதோ டேபலநேர் யெய்தும் வறட்சி
சொறிசிரங்கு பித்தங் தொடரும்- நிறையுங்
கரகமெனப் பூரித்தகச்சுமூலை மாதே
வரகரிசி சோற்றால் வழுத்து."

வாழை-Musa paradisiaca

"மாந்த மொடு நமைச்சல் வாதகப மும்பெருகும்
பாந்தல் உறு கரப்பான்பரவுங்காண் - பூந்தடக்கை
யாழைப் பழித்த மொழி அன்னமே கேள் நவரை
வாழை பழத்தால்மதி".
"வாழையின் கனியரை வாதமாய்க்காய்முழு
மருத்துவ ரக்கினி மூலம்."

-தேரையர் காப்பியம்

பாகல்-Momordica charantia

"பித்தமொடு வாத பெருக்கைமிக உண்டாக்குத்
தத்துகரப் பானைத் தருவிக்கும் - பற்றிரத
தாரபா டாணந் தனைமுறிக்குத் தப்பாது
காரவல்லி யாம்பாகற் காய்"

கத்தரி-Solanum melongena

"பித்தங் கரப்பான் பெருங்கிரந்தி குட்டமிவை
மெத்தகவுமா மெய்யலழில் வீறுங்காண்- சத்தான
தாதுநட்ட மாங்கபங்காற் சார்ந்த சுவாசமும் போம்
ஒதுகத்தரிப்பழத்தா லுன்".

கொய்யா- Psidium guajava

"திரிதோஷம் சென்னி திருப்பம் அரோசி
பெருமந்தம்வாந்தி பெரூமூல - கரப்பானும்
மெய்யாய்ப் பரவுமலம் மெத்தவிடும் போக முண்டாங்
கொய்யாபழத்தினாற் கூறு"

முட்டை:Galus domesticus.

"வாதபித்தங் சேர்ப்பிக்கும் வன்றோடம் புண்போக்குந்
தாதுவை மெத்த தழைப்பிற்கு- மோது
கபத்தையடக்கும் கரப்பானுண்டாக்கு
மிபத்தையுறுங் கோழி முட்டை யெண்"

These food stuffs mostly have vadham domination and avoidingthese food will help in treating the disease and prevent exacerbations.In general, all the food mentioned above have histidine which undergoes decarboxylation and release histamine which causes asthma and other allergies.

Avoid spicy food,narcoticsand sour taste.

கன்ம நீக்கம்:

It is described by Agasthiyar

"உண்மையென்ற கரப்பானொடு வண்டுகடி குட்ட
முலகிலுள்ளோர்க் இதுவந்த உண்மைகேளு
வாறான நீர்விடம் போல வந்த தோட
மாற்றவொடு நிவிர்த்து சொல்வேன்மருவிக்கேளு
கூறான கணபதிக்கு நெற்பொரி யவலுங்
கொட்டையென்ற தேங்காய்தான்பத்துநூறு
வீறானயிளநீரும் பத்து நூறு
வெள்ளியென்ற கிழமையிலே பழந்தான்நூறு
சாறான விளநீரில் முப்பழமும் பிசைந்து

சண்முகனார் தமையனுக்கபிடேகஞ் செய்யே”

“செய்தபின்பு தேங்கடையெடுத்துச் சூறை

சிதறவே உடைத்திடுவாயா ரந்தான்

கொய்திமலர் சிரசுதனிற் பொதியுங் கொட்டிக்

கூட்டியெல்லாம் வாதியே கொள்ளை யென்று

பையங்களும் கீந்தாக்காற் பாவற் தீரும்

பதிவாகத் தூபமுடன் தீபங்காட்டு

எந்தவொரு கன்மதினை நிவர்த்தி செய்தா

விடுமருந்து சொல்லுகிறே னிதமாய்க் கேளே”

-அகத்தியர் கன்ம காண்டம்

Restoration

To avoid remissions and exacerbations.patients are advised to avoid food and external allergens and to reduce stress by yogasanana,pranayama and meditation.

Yoga

Yoga is the oldest and it how to conquer disease,suffering and death. Through body postures,rhythmic breathing, concentration and mediation it shows the way to self-realisation. Yoga is of 4 types.

1.Karmayoga-Discharging duties selflessly

2. Gnana yoga-Conceptionof unreality of everything except god

3.Bhakthi yoga- Chantinggods name,singing his praise,worship and rituals

4. Rajayoga- Breath control,yogaasanas, Bandhanas and mudhras

There are eight limbs ofyoga called as Astanga yoga

1. Iyamam
2. Niyamam
3. Asanas
4. Pranayam
5. Prathiyakaaram
6. Dharanai

7. Dhyanam
8. Samadhi

Benefits of yoga

- ✓ It isa curative of both mind and body
- ✓ Releives mental stress and strain
- ✓ Asanes withbreathing brings down the stress
- ✓ Yoga easesmuscles,blood flow and removes toxins.

During asanas practice, body releases endorphins that relive stress.

There are certain asana to relive stress

1.Uttanaasanam

2.Savasanam

3.Janusirasasana

4.Pranayamam

5.Meditation

Sirasana

To perform this pose, kneel on floor inter locking fingers and rest on head. Slowly lift your knees and leg off the floor coming to head stand position. If this is difficult use a wall support.

It helps to increase circulation to head and face and helps to alleviate stress related disorders.

Uttanasana

Stand with feet slightly apart Place your hand on hips and bend forward from the hip joint with a flat back. Try to reach the floor. It not possible bend knee to reach floor relax head and gently move neck side to side alleviate tension.

It is a beneficial yoga for increasing circulation, reducing stress and inducing body's parasympathetic system.

Janu Sirasana

Sit on the floor with legs extended .Bend right knee and bring the sole into groin try to hold the left foot with palm of both hands and head touches knee.

PRANAYAMAM

The control of breathing called as pranayama

It include three process

1.Rechaka– Process of exhaling or breathing out.

2. Puraka – Process of inhaling

3. Kumbhaka-Process of retaining breath.

Kumbhaka of two types

1.Internal kumbhakam- Act of retaining breath

2. External kumbhakam- Action of not breathing in and out.

Pranayama

"Pranayama is to yoga what heart is to human body "

Pranayama is an important bridge between outward practices of yoga like asanas and inward surrendering yoga practices. It is a link between mind and body. It consist of deepening and extending prana or life force until it leads to condition of peace.

Prana – Life force

Anayama – control

Benefit

- Cause rhythmic expansion of lungs creating better circulation within kidney, liver, stomach, spleen, intestine, skin etc.,
- The mind is calm and concentration becomes better.
- Skin becomes smoother because of better circulation and release of tension.
- Oxygen is provided for better functioning of heart and lungs.

Meditation

It is a practice in which individual trains and induces a mode of conscious to promote single point concentration analysis and indestructible state of well being

Benefits

- Reduction of free radicals and reduces tissue damage
- Lowers BP, HR
- Increases Serotonin level
- Builds self confidence
- Develops will power

In scientific study it was proved that alpha waves produced when sensory impulses are processed are increased this alpha waves suppress irrelevant or distracting sensory information.

MODERN ASPECTS
ECZEMA

Definition

Dermatitis and eczema is non contagious inflammation of the skin characterized by erythema, scaling, oedema, vesiculation and oozing.

Eczema has been used as a descriptive term since the sixth century.

Eczema is a Greek word (Ec-means “out” zeo – means “boil”) The whole word implies “boil out”.

Eczema is a specific type of allergic cutaneous manifestation of antigen – antibody reaction.

Aetiology

Basically, two factors cause dermatitis and eczema

Firstly, all allergic or sensitive skin. Secondly, exposure to an irritant., The dermatologist Darier has correctly said that,

“There is no eczema but an eczematous patient’

The general predisposing causes are

Age

Eczema sometimes occurs in infancy, at puberty and at the time of menopause

Genetic & Family predisposition

There is usually a personal or family history of allergy, viz asthma eczema and hay fever.

General debility

By lowering resistance of the individual predisposes to eczema.

Climate

Climate extremes like heat and severe cold.

Psychological stress

Local factors

Xeroderma or ichthyosis, greasy skin hyperhidorsis, varicose veins, Direct contact with pet and domestic animals (especially their saliva or fur) and indirect contact with animal dander.

Rough, scratchy, tight clothing, especially clothes made of wool (or) stiff fabrics.

The frequent use of soaps and cleaning products that tend to give lack of normal shiny of the skin.

FOOD AS ALLERGENS

a)Animal sources:

Cow's milk- Casein and β lactoglobulin are known to be the major allergen. Egg white is the allergising factor.

Any species of fish can responsible for all allergic reactions.

Meats of all kinds – It has been observed that in cases of hypersensitiveness to the meat of a certain animal, the liver, pancreas, kidney and brain.

b)Plant sources

Wheat flour- allergic reaction due to wheat gluten.

Some workers in glue factories using soya flour as an ingredient of glue, develop severe allergic symptoms.

Peas, beans and lentils have been reported to produce allergic reactions in some individuals.

Consumption of edible mushrooms sometimes may cause allergic reactions.

Fats and oils have been found to produce allergic symptoms in some individuals.

The vegetables which have been found to produce allergic reactions in some individuals are carrot, spinach , cabbage, onion, garlic, sweet potato, cauliflower and pumpkin.

Among the fruits, strawberries, bananas, oranges, grapes and apples are the principal offenders.

Occasionally allergic reactions can occur due to consumption of pears, cherries, plums , gooseberries.

Citrus fruits and tomatoes may cause atopic allergy.

Beverages

Allergic actions are due to traces of foreign substances derived from food materials employed in the preparations of clarifying the beverage such as

- Barley malt and yeast in beer.
- Rye corn and wheat in whisky.
- Fish, glue, egg white or yeast in cheap white wine and champagne.

Food contaminants as allergens

For example preservations, insecticides and insect excreta or fragments may act as allergens.

Nor dihydroguairetic acid (NDGTA) is an antioxident used in food facts.

Cosmetics

Common ingredients in cosmetics such as perfumes, face, creams, deodorants ,hair, dye, shampoos , parabens, benzocaines lanolin, thimersol, etc.,

Clothing:

Rubber chappals, spectacle, resins, frames, furs, nylon, synthetic dyes. Most buttons are formaldehyde resins, epoxy resins are all common sensitizers.

Medicaments:

This include sulfonamides, penicillin streptomycin cocaine, tincture, benzoin, detol, phenergon cream & sticking plaster etc.,

INDUSTRIAL AND OCCUPATIONAL AGENTS

Occupational:

Agriculturists	-	Plants, weeds, fertilizers
Automobile	-	Oil, petrol, solvent, grease, paints
Building workers	-	Cement, lime, paints, insecticides, wood kerosene, turpentine oil Chemical and
Pharmaceutical industries	-	Dyes, Chemicals , explosives, solvents, disinfectants, detergents
Coal miners	-	Mechanical injuries
Dentists	-	Cocaine and its derivaives
Engineering industries	-	Cutting oils, solvents

Housewives	-	Soaps, detergents, vegetables, fruits, nickel, polishers, artificial flavours
Nurses and Doctors	-	Iodine, streptomycin, chlorpromazine, tincture, benzonin
Photographers	-	Hardeners, solvents, glass, cellulose esters
Rubber workers	-	Additives like TMT, MBT, dyes, glues, oils
Tannery workers	-	Chromate, formaldehyde, arsenic alkalies, acids.
Textile workers	-	Formaldehyde, solvents, dyes, bleaches.

Ten common allergens come across in practice.

1. Parapheneylene diamine
2. Nickel sulphate
3. Pottasium dichromate
4. Parthenium hysterophorus
5. Nitrofurazone ointment
6. Neomycin sulphate
7. Formaldehyde
8. Turpentine
9. Garlic
10. Epoxyresin

EXACERBATING FACTORS

• Irritants	-	Physical, chemical or electrical
• Sensitizers	-	Plants, clothing, cosmetics, medicaments , infection, diet and focal sepsis
• External infections fungus	-	Streptococci ,staphylococci,
• Diathesis hyperhidrotic	-	Allergic, xerodermic, or seborrhoeic
• Drugs	-	State of local or general nutrition

- Climate - Temperature and humidity
- Mental and emotional conflicts
- Internal septic focus shedding toxins or causing bacteraemia
- Scratching, Chemical trauma, Climate, Stress and Strains keep the process going with the result that eczema becomes chronic.

  It is still controversial whether the endogenous fators like diet, emotional strain and stress, focal sepsis, state of digestion, nutrition are more important than exogenous factors like infection, irritants and sensitizers (or) vice versa.

In practice, mixed eczemas are much more common than pure entities. History and clinical observation are very important in establishing the exact etiological diagnosis.

Immunology

Immunology is a science which deals with the body's response to antigenic challenge,

This mechanisms are involved in the protection of the body against infectious agents but periodically they can also cause damage.

Sensitization develops when a different clone of T-lymphocytes is activated. The sensitized T-lymphocytes yield two sub populations of lymphocytes.

1. Memory cells that are responsible for the persistence of contact allergy
2. Effector cells that initiate the allergic response when appropriately challenged.

PATHO PHYSIOLOGY

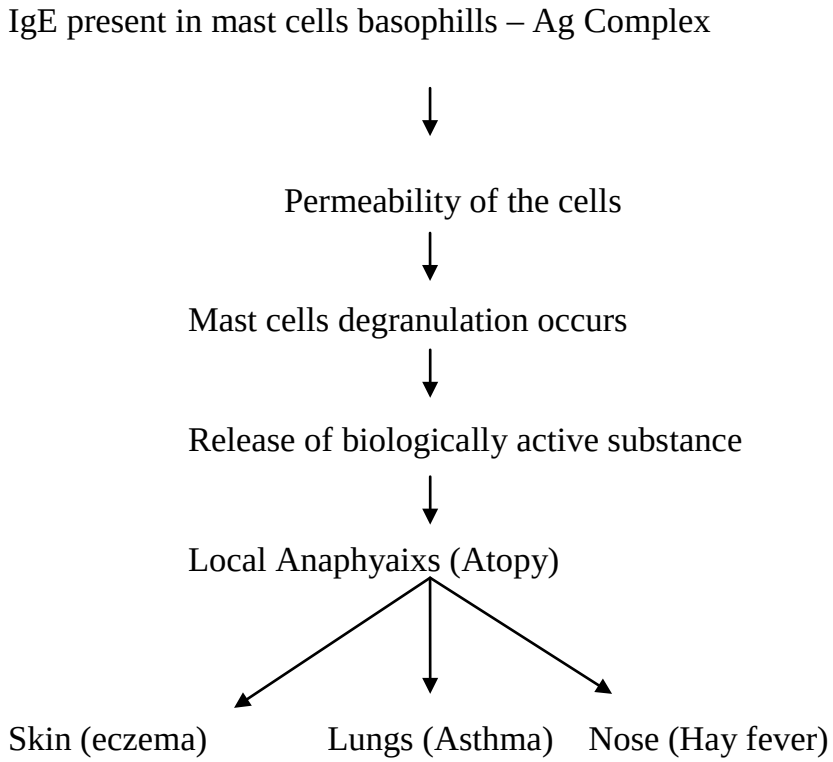
Allergy & hypersensitivity:

The term allergy was first used by Von Pirquit (1874- 1929) to denote changed reactivity of the body to outside chemicals. Allergy means altered energy (allps- other, ergon- energy)

Chemical reactivity in this context means that the body behaves in a particular way when it is expose to a chemical substance known as “Allergen” for the first time, but changes the nature of its reaction when it proteins known as antibodies. The term Hypersensitivity refers to the injuries consequences in the sensitized host, following contact with specific antigens. This is classified into immediate and delayed types. Immediate hypersensitivity(Local anaphylactic reaction- Atopy)

Antibodies (cytotropic IgE antibodies) are fixed on the surface of tissue cells (mast cells and basophils) in sensitized individuals. The antigens combines with the cell- fixed antibody, leading to release of pharmacologically active substances (vaso active amines) which produce the clinical reaction.

Flare is due to dilation of arterioles by local axon reflex and the liberation of vasodilator substances like histamine and its by products like serotonin, bradykinin, acetylcholine from the injured cells like mast cells and basophiles etc



Histamine:

Histamine is formed by the decarboxylation of histidine found in the granules of mast cells, bascophils and in platelets. Released into the skin,

histamine stimulates sensory nerves , producing burning and itching sensations. It causes vasodilatation and hyperemia by an axon reflex (flare effect)and oedema by increasing capillary permeability (wheal effect) Triple response – Flush, Flare , Wheal

Atopy:

The antigens commonly involve in atopy are characteristically inhalants (pollen, house dust) or ingestants (eggs, milk).Some of them are contact allergens, to which the skin may be exposed. These atopens are generally not good antigens when parentally but induce IgE antibodies . Atopic sensitization is developed spontaneously following natural contact with atopens.

Cell- mediated reaction (Delayed hypersensitivity)

These are typically provoked by intracellular microbial infection or hastens like simple chemicals applied on the skin, evolve slowly and consist of a mixed cellular reaction involving lymphocytes and macrophages in particular.

T- Lymphocytes carrying a specific antibody on their surface are stimulated by contact with the antigen to release certain active factors. This form of allergic phenomenon is observed in contact dermatitis (Eczema) and other allergic reactions following sensitization to certain chemical, bacterial, viral and fungal antigens and in the rejection of transplanted tissue.

Langerhans cells of the skin capture locally applied hapten, along with the modified tissue proteins, migrate to the draining lymph nodes where they present the processed antigen to T cells. The sensitized T cells travel to the skin site, where on contacting the antigen they release various lymphocytes. Th 1 cells secrete IFN and IL-2 which activate macrophages and other ly phocytes . Th2 cells release IL-4, IL-5 and other factors that cause tissue damage. This results in eczema formation.

Cutaneous Allergy:

In the skin there are two important but different allergic reactions occur.

Dermal reaction:

- Dermal reaction is commonly seen in urticaria
- The causative antigen reaches the skin through ingestion, inhalation or injection of protein substances and the reaching antibodies circulate in the serum
- Allergic reaction takes place in the dermis
- Intra dermal tests (scratch) shows reactivity
- The response is wheal formation which occurs in few minutes

Epidermal reaction:

- It is seen in allergic dermatitis or eczema
- The causative substance reach the skin by contact. Intra dermal allergic tests are negative
- But patch test shows reactivity

Allergen + Epidermal protein – Antigen formation

↓

Anti bodies production

(Probably in lymph glands)

↓

Circulation

↓

Fixed in epidermal cells

On next occasion

Allergen + Antibodies – Eczematous reaction (In epidermis)\

- A severe local reaction may result in autointoxication & dissemination of eczematous reaction to distant parts.

Status Eczematicus

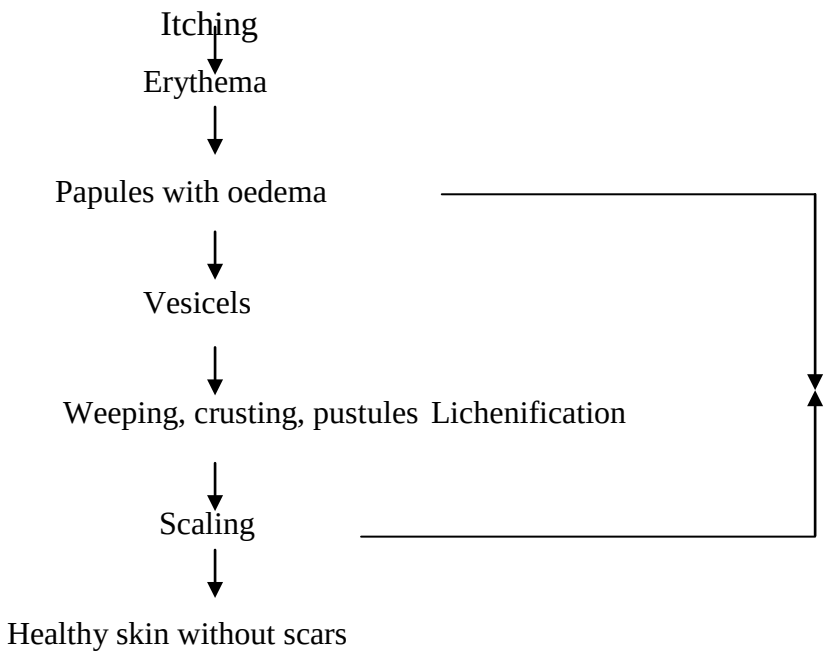
It is believed that in case of severe allergic states, a state may develop when the patient becomes hypersensitive to even unrelated substances resulting in

status eczematous comparable to status asthmatics in practice of internal medicine.

Clinical Features:

Eczema is a specific type of allergic subcutaneous manifestation of antigen antibody reaction. It is characterized by superficial inflammatory oedema of the epidermis associated with vesicle formation. Itching varies form mild to severe paroxysms which may even interfere with work and sleep. The natural history of eczema is represented as follows.

HISTORY OF ECZEMA



Stages of eczema:

1.Acute Stage:

- Itchy erythema followed by oedema of the epidemis (spongiosis) papulars vesicles oozing and crusting
- This stage does not last long
- In about a couple of weeks, the lesions start to heal. If the cause persists , the eczema lasts over months or years.

2.Chronic stage

- There is less oedema

- ❖ Vesiculation, the integument appears thickened, and pigmented with prominent criss- cross (Lichenification) markings
- ❖ This is the end result of all types of long standing eczemas.
- ❖ This is accompanied by a variable degree to vasodilatation and T-helper lymphocytic infiltration in the upper dermis.

3.Sub acute stage:

- ❖ Papules and scaling with moderate oedema and erythema.
- ❖ Acute eczema may pass through this stage before it heals
- ❖ Completely or become chronic

Histopathology

Characteristic features are intercellular oedema (sponges) and vesicle formation. There may be mild to moderate dermal reaction

In chronic cases, hyperkeratosis, acanthosis and infiltration of upper dermis with lymphocytes are seen,

In acute dermatitis:

The epidermis contains vesicles and bullae with variable inter and intracellular epidermal oedema. The vesicles and bullae are permeated by acute inflammatory cells. Usually the vesicle contents will include lymphocytes with some eosinophil contents is of sufficient degree, the basal layer is disturbed and may not be identifiable.

There is moderate upper dermal lymphocytic and occasionally neutrophilic infiltrate and oedema. Except in severe cases the lower and mid-dermis are not involved. When the vesicles rupture crusts composed of precipitated fibrin, necrotic debris, epithelial cells and polymorpho – nuclear leucocytes can be seen on the surface.

In Sub acute dermatitis:

The vesicles are smaller and ordinarily not visible to the naked eye but can be seen with microscope under low, power. There is usually less oedema than which is found in acute dermatitis, moderate acanthosis and parakeratosis are usually present. An inflammatory infiltrate composed chiefly of lymphocytes with some neutrophils and eosinophils is present in the upper and to a lesser extent the mid-dermis and after is predominantly peri vascular in distribution. The lower dermis is not remarkable.

In chronic dermatitis:

No vesicles are present. There is moderate to marked acanthosis and variable hyperkeratosis with scattered para keratosis. The rate ridges are some what elongated the basal layer is basal layer is usually intact. The oedema may not be noticeable (or) very minimal . Vesicles are absent. a slight to moderate lymphocytric infiltrate is usually present in the upper and to a lesser extent in the mind- dermis. Neutrophills are not seen. Lower dermis is not remarkable.

There is moderate upper dermal lymphocytic and occasionally neutrophilic infiltrate and edema. Except in severe cases the lower and mid- dermis are not involved.When the vesicles rupture, crusts composed of precipitated fibrin, necrotic cells and polymorphonuclear leukocytes are seen on the surface.

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The vesicles are smaller and ordinarly not visible to the naked eye but can be seen with microscope under low power. There is usually less oedema than which is found in acute dermatitis acanthosis and parakeratosis are usually present. An inflammatory infiltrate composed chiefy of lymphocytes with some neutrophils and eosinophils, is present in the upper and to lesser extent the mid-dermis and after is predominantly in distribution. The lower dermis is not remarkable.

CLASSIFICATION

There are two groups of eczema

Exogenous	**Endogenous**
Irritant	Atopic
Allergic	Seborrhoeic
Photodermatitis	Discoid
	Asteatotic
	Gravitational
	Neurodermatitis
	Infectious ecezematoid dermatitis

Types of Eczema

1.Contact Dermatitis

Contact with everyday objects from shampoo and jewelry to food and water causes this very common type of eczema. When the contact leads to irritated skin, the eczema is called **irritant contact dermatitis.** If an allergic reaction develops on the skin after exposure, the eczema is called **allergic contact dermatitis.**

Signs and Symptoms

Allergic contact dermatitis usually develops a few hours after the allergen (substance to which the person is allergic) touches the skin and causes:

- Itchy, swollen, and red skin or dry and bumpy skin
- Blisters may develop if the reaction is more severe
- Blisters may break, leaving crusts and scales
- Skin may later flake and crack feet. Other common sites for these patches are the bends of the elbows, backs of knees, ankles, wrists, face, neck, and upper chest. The patches may not always appear in these areas; they can occur anywhere on the skin, including around the eyes and on the eyelids.
- Rash. This often appears after the itchy skin is scratched or rubbed, but not always. A rash can occur even when the skin is not scratched.

- Skin can swell, crack, "weep" clear fluid, crust, and scale.
- Patches may bubble up and ooze or be scaly, dry, and red.
- Without proper treatment, the skin thickens to protect itself from further damage caused by scratching. This thickening of the skin is called as "lichenification."

Irritant contact dermatitis occurs after frequent exposure to a mild irritant, such as detergent, and after brief exposure to a strong irritant, such as battery acid. Signs and symptoms of irritant contact dermatitis include:

- Mild irritant - Begins with dry, chapped skin.With repeat exposure, patches of itchy, red, scaly, and swollen skin develop. The skin may burn or sting upon contact. If exposure continues, the skin tends to crack, scale, and become excessive dry. Sores and blisters may develop that later erupt, forming crusts and scales.
- Strong irritant - Upon contact, the skin mayburn, sting, and/or itch. Redness, swelling, blistering usually develop. Later, scale may form.Once irritant contact dermatitis develops, exposure to mild substances, such as baby shampoo and even water, can irritate the skin and make the condition worse.

- Anyone can develop **irritant contactdermatitis** with sufficient exposure to something that damages the skin and causes irritation.
- Allergic contact dermatitis occurs whensomeone develops an allergy to a something that touches the skin.

Causes

Allergic contact dermatitis. More than 3,000 allergens (substance to which the person is allergic) are known to cause allergic contact dermatitis. Common allergens include:

- **Antibiotic ointment.** Ingredients in over-the-counter topical antibiotic ointments frequently cause an allergic skin reaction.
- **Clothing and shoes.** The leather, glue, orrubber in one's shoes can cause allergic contact dermatitis as can dyes and fire retardants used in clothing.

- **Concrete.** Often the cause of chronic handdermatitis, a reaction to concrete can persist long after the exposure ends.
- **Fragrances.** Found in perfumes, makeup, aswell as skin and hair care products, fragrances commonly cause an allergic reaction
- **Metals.** Metals occur in everyday objects thatwe touch and in our food. Nickel, one of the most common metals that causes an allergic reaction, is found in jewelry and many foods, including tomatoes, chocolate, nuts, and soy. Mercury (used in dental fillings), gold, cobalt, and chromate (used to tan leather) are other metals that frequently cause allergic contact dermatitis.
- **Plants.** A brush with poison ivy, poison oak, orpoison sumac is a frequent cause.
- **Rubber accelerators.** Found in everythingfrom mouse pads to gym equipment, these allergens can be difficult to find. Sometimes allergic contact dermatitis does not flare until it is triggered. Ultraviolet (UV) light and perspiration can trigger allergic contact dermatitis**.**
- **Exposure to ultraviolet (UV) light.** The rash may not develop until triggered by exposure to sunlight or another source of UV light, called asphotoallergy, this form of allergic contact dermatitis occurswhen an everyday product, such as a fragrance or sunscreen, is applied to the skin and then exposed to UV light. Some medications also can cause a photoallergic reaction.
- **Perspiration.** This may trigger a flare-up. Forexample, some people who develop an allergy to nickel may not have a flare-up when nickel touches their skin unless they perspire.

Irritant contact dermatitis. When a substance damages the skin faster than the skin can repair itself, irritant contact dermatitis develops.Substances that frequently cause irritant contact dermatitis include water, soaps, detergents, cleaners, fiberglass, hair dyes, solvents, oils, paints, varnishes, foods, and metalworking fluids.

Risk Factors

- **Medical history.** While anyone can developirritant contact dermatitis, having a history of atopic dermatitis, allergic contact dermatitis, or psoriasis increases the risk. Pre-existing hand dermatitis also increases the risk.
- **Age.** Younger individuals are more susceptibleto allergic contact dermatitis because the immune system of a younger person is more likely to overreact than the immune system of an older person.
- **Repeat exposure.** The first exposure does notalways result in an outbreak. With allergic contact dermatitis, the person's skin often touches the allergen for many years before a reaction develops. Mild irritants, such as detergent, fish scales, and garlic, require frequent exposure to cause irritant contact dermatitis.
- **Occupation.** People who work in certainoccupations have a much higher risk of developing contact dermatitis. Health care workers, hairdressers, people who handle food, bartenders, janitors, and mechanics have an increased risk.
- Gender. Female have an increased risk
- Environment. Extreme heat and cold as well as very humid and dry climate increases the risk.

Diagnosis

1.Patch testing

2.Blood investigations- Ig E, ESR, FBC

ATOPIC DERMATITIS

- Extremely itchy patches of skin. The skin may not always itch. In infants, these patches tend to develop on the scalp and face, especially on the cheeks. Teens and young adults are more likely to see patches on their hands and these substances in the workplace. This may include using a barrier cream, wearing gloves, and practicing glove hygiene.
- With long-term exposure to an allergen, theskin becomes thick, red, and scaly. Over time, the skin can darken and become leathery.

Epidemology

- Approximately 10% to 20% of the world's population develops atopic dermatitis.
- An estimated 65% develop atopic dermatitis during their first year of life, and 90%develop the condition before age 5. While rare, atopic dermatitis can begin at puberty or later.
- While atopic dermatitis resolves in many children by age 2, 50% continue to experience signs and symptoms into adulthood — usually as hand eczema.
- Occurs in all races and skin types.

Causes

While the cause of atopic dermatitis is not fully understood, researchers believe a complex interaction of several factors — the genes we inherit, where we live, a breakdown of the outermost layer of skin, and a malfunctioning immune system — leads to atopic dermatitis.

Risk Factors

The following appear to increase one's risk:

- **Family history.** A family history of atopic (tendency for excess inflammation in theskin, linings of the nose, and lungs) conditions, such as atopic dermatitis, asthma, or hay fever. This remains the strongest risk factor. If one or both parents have a history of atopic dermatitis or an allergic condition, the child is much more likely to develop atopic dermatitis.
- Living in a developed country, urban area (especially one with higher levels of pollution) increases risk.
- **Age.**Appears before 1 year of age in 65% of people; 90% develop before reaching 5years of age.
- **Gender.** Females are slightly more likely than males to develop.
- **Mother's age at time child born.** Atopic dermatitis tends to be more common whenthe mother gives birth to a child later in her childbearing years.
- **Social class.** Atopic dermatitis tends to be more common in higher social classes.

- **Family size.** Atopic dermatitis tends to be more common in immediate families thatare smaller in size.

Duration

- Several studies suggest that when atopic dermatitis develops in an infant or youngchild, the child tends to get better with time. For some children, the condition completely resolves by age 2 without treatment.
- Atopic dermatitis also can be a lifelong condition. About half (50%) of people whodevelop atopic dermatitis as children have it for life. It tends to become less severe with age.

Diagnosis

- The patient is more likely to have atopic dermatitis if there is a history of atopic dermatitis, asthma or hay fever.
- Patch testing used to find allergies

Dyshidrotic Dermatitis

Occurring only on the palms of the hands, sides of the fingers, and soles of the feet, this common eczema typically causes a burning or itching sensation and ablistering rash. Some patients say the blisters resemble tapioca pudding.

Other Names

- Hand eczema
- Pompholyx
- It is due person's reaction to eventsoccurring within the body (e.g., having another medical condition) and factors occurring outside the body (e.g., the weather) .
- Excessive sweating originally believed to bethe cause — does not cause dyshidrotic dermatitis.

Risk Factors

- It has been identified that several factors can increase one's risk of developing dyshidrotic dermatitis and the risk of flare-ups.

- **Stress.**Probably the most common risk factor, many patientsreport a stressful period before an outbreak.
- **Gender.**Females tend to develop dyshidrotic dermatitis morefrequently than males.
- **Weather.**Flare-ups are most frequent in hot humid weather. In fact, the weather is a common trigger for many patients. A study of104 patients found that the following weather conditions triggered flare-ups: heat (29.8% of patients), humidity (24% of patients), and cold (12.5% of patients).
- **Pre-existing atopic condition**(e.g., atopic eczema, hay fever, orasthma). Having one or more of these conditions significantly increases the risk.
- **Pre-existing contact dermatitis. Having contact dermatitis** significantly increase the risk of developing dyshidrotic dermatitis.
- **Pre-existing infection.**Having an infection in another part of thebody may increase the risk. A study found that one-third of the patients saw the dyshidrotic dermatitis on their hands clear after they received treatment for their athlete's foot.
- **Metal implant, such as a hip replacement**
- **Aspirin, oral contraceptives, and smoking.**

Duration

While some patients experience only one outbreak that clears in 2 or 3 weeks without treatment, others have recurring flare-ups that can range in frequency from once a month to once a year.

Signs and Symptoms

- Small, deep blisters can form on the palms, sides of the fingers,and/or soles
- Intense burning or itching
- Inflamed skin (reddish and hot to the touch)
- Cracking and peeling skin
- Affected areas may sweat excessively
- Skin may become infected, causing oozing blisters and crusts

- Skin between the fingers can soften; skin may feel spongyNail changes are seen if dyshidrotic dermatitis persists for a long time. Thefingernails can develop ridges and pitting. The nails may thicken and discolor.
- Sometimes as the skin clears, the skin peels and a new crop ofblisters appear
- Extensive peeling and cracking in severe cases
- Most frequently begins between 20 and 40 years of age, but can develop earlier or later. Rare in children, but can develop in children who have atopic dermatitis.
- Occurs in all races

Causes

- Unknown

DIAGNOSIS

- Diagnosis begins with a complete medical history and visual examination of the skin. A swab of the affected skin is taken if it looks infected.
- Patch testing
- Blood tests

Lifestyle Changes

- Reduce stress
- Avoid allergens and irritants
- Avoid excessive sweating and dry conditions.
- Protect the skin from further injury**.** Using gloves to protectthe hands from irritants and allergens, wearing socks made of 100% cotton, and avoiding strong soaps can help protect damaged skin.

Hand Dermatitis

Hand dermatitis is not one specific type of eczema as is atopic dermatitis or seborrheic dermatitis. Any type of eczema that develops on the hands can be classified as "hand dermatitis."

Signs and Symptoms

The signs and symptoms may initially vary. Without treatment and preventive measures, hand dermatitis can become severe. The following are common signs and symptoms:

- Dry, chapped hands (may be first sign)
- Later the hands tend to develop patches of red, scaly, and inflamedskin that can itch
- Itchy blisters or other lesions may form, skin may crack and weep
- Pus-filled lesions, crusting, and pain if skin becomes infected
- Can spread beyond the hands, particularly to the forearms and feet,if a skin infection develops or an allergic reaction is not treated
- Deformed nails when hand dermatitis persists for a long time
- Women may develop it more often.The reason iswomen tend to work in occupations that involve frequently immersing their hands in water, such as nursing and hair styling. It is believed that 1 in 3 nurses has hand dermatitis.
- Between the ages of 20 and 39, it appears that hand dermatitis is most common,

Causes

Hand dermatitis usually does not have one clear-cut cause

- **Genes.** A tendency to develop skin reactions or a certain type of eczema is often inherited.
- **Irritation.** With repeat use or short but heavy exposure, numerous everyday items can irritate skin. Water is probably the most common irritant. Frequent hand washing or immersing the hands in water too often can remove protective oils from the skin. When the oils are removed faster than they can be replaced, the skin becomes less pliable and more susceptible to hand eczema.
- **Allergy.** An allergic reaction occurs when the body's immunesystem overreacts to something that does not cause everyone's immune system to overreact. Common allergens (substances that cause an allergic reaction) that lead to hand dermatitis include nickel, Balsam of Peru (added to fragrances, foods, and skin care products), rubber, and topical vitamin E.

- **Poor glove hygiene.** Wearing gloves can protect the skin from substances found in the workplace and while working around the home. However, slipping gloves on and off may allow irritants or allergens to get inside the gloves. This can trigger a flare-up.

Risk Factors

- **Medical condition.** Having an atopic condition (atopic dermatitis,asthma, or hay fever) increases the risk. When combined with frequent hand washing or even frequently immersing the hands in water or chemicals, the risk is even greater. An estimated 7% to 23% of people who have atopic dermatitis also have hand eczema. In fact, some patients who have atopic dermatitis during childhood find that their skin clears during adolescence and that the eczema returns later, but affects only the hands and feet.
- **Occupation.**On-the-job tasks, such as frequent hand washing,immersing your hands in water several times a day, as well asusing solvents and other chemicals can strip the skin of its protective barrier. Nurses, hair stylists, bartenders, chefs, caterers, mechanics, manual workers in chemical -companies, painters, and metalworkers have an increased risk of developing hand eczema.
- **Stress.** Periods of stress worsen all types of eczema as well as increase the risk of developing hand dermatitis.
- **Environment.** Low humidity and cold weather can rob the skin of moisture, which increases the risk of developing some types of hand dermatitis. In other cases, heat and high humidity increase the risk. For example, wearing gloves in a hot and humid environment for long periods can irritate the skin, leading to a flare-up.
- **Perspiration.** Perspiring heavily can increase the risk, especially if the person wears gloves and the hands become overheated. Trapped inside the glove, the perspiration can irritate the skin and increase the risk of developing hand dermatitis.

Neurodermatitis

This common eczema develops when nerve endings in the skin become irritated, triggering a severe itch-scratch-itch cycle. Common causes of nerve irritation include an insect bite and emotional stress.

Signs and Symptoms

- Intensely itchy skin that is usually itchiest when the person is resting or relaxing.
- Once the skin is scratched, a vicious itch-scratch-itch cycle develops. The more theskin is scratched, rubbed, or even touched, the more it itches. The itch can become so intense that it disrupts sleep.
- Develops on any area of the body the person can scratch or rub. Most commonly

appears on the lower legs, ankles, back and sides of the neck, wrists, forearms, and genitals.

- Constant itch causes nervous tension (anxiety) in some patients.
- Often develops on skin previously affected by an outbreak of atopic dermatitis or

  contact dermatitis (two common types of eczema) or psoriasis.
- Small, well-defined, scaly, reddish plaques.
- Openings in the skin that cause burning pain and leave the patient more susceptible toinfection. Signs of infection include open sores, cracks in the skin, and honey- colored crusts.
- Visible scratch marks.
- Over time, constant scratching causes the skin to thicken and darken, and lines in theskin to become more prominent. Thickening can cause a cutaneous horn (piling up of skin cells that resembles an animal's horn).
- Affected skin may turn pink, red, or reddish brown. When the skin becomes very thick,it sometimes develops a grayish hue.

Neurodermatitis develops more frequently in:

- People who have psoriasis, allergic contact dermatitis, or irritant contact dermatitis
- Individuals who have an atopic condition, such as atopic dermatitis, asthma, or hayfever
- Females
- Mid-to-late adulthood, with most cases developing between 30 and 50 years of age

Causes

While the exact cause remains unknown, researchers have found that for some people exposure to certain triggers can increase the risk of developing neurodermatitis.

Risk Factors

Research indicates that the following can irritate the nerves of susceptible people, triggering the intense itch-scratch-itch cycle of neurodermatitis:

- Clothing worn tightly and made of synthetic fabric or wool
- Dry skin
- While uncommon, these may also trigger neurodermatitis:
- Exhaust from traffic (long-term exposure)
- Exposure to allergens and skin irritants. For example, some people develop neurodermatitis after using a hair dye that contains P-phenylenediamine (PPD).
- Heat
- Insect bite
- Period of intense stress or emotional trauma
- Poor blood flow
- Scar, especially a keloid-type scar

Duration

- Neurodermatitis remains until it is effectively treated.
- Since effective treatment requires the person to stop scratching, the condition can bea challenge to treat.
- Neurodermatitiscan return with exposure to triggers.

Diagnosis

Since neurodermatitis may occur along with other common skin conditions, such as other types of eczema and psoriasis, it is best to see a dermatologist for a diagnosis. Effective treatment requires that all skin conditions be accurately diagnosed. Diagnosis of neurodermatitis involves:

- **Visual examination of the skin**.

Diagnosis also may include:

- **A skin biopsy.** This procedure helps diagnose a skin infection or another skin condition.
- **Patch testing.** This test helps determine what substances cause an allergic reaction in the patient.

Nummular Dermatitis

- Discoid eczema
- Nummular eczema
- Nummular eczematous dermatitis

Signs and Symptoms

- One or several patches may appear and tend to:

- This begins as a group of tiny reddish spots and blister-like lesions that enlarge and grow together to form a reddened, coin-shaped patch that ranges in size from less than 1 inch to more than 4 inches.
- Weep fluid in the beginning and then become crusty. Long-term patches are scaly.
- Be pink, red, or brown and well-defined.
- Develop on the legs, but also occur on the torso, arms, hands, and feet.

- Clear in the center, forming a "ring" around the clear skin that causes the patch to resemble a ringworm infection.

➢ Patches often itch and burn. Itching and burning range from severe to barely noticeable. The itch may intensify at night, disturbing sleep.

➢ A yellowish crust may develop on the patches if a **Staphylococcus aureus** (staph)infection develops.

➢ While the skin between the patches usually remains clear, the skin may be very dry and easily irritated.

➢ When this type of eczema clears, it often leaves the skin a bit darker (hyper pigmentation) or lighter (hypopigmentation) than the surrounding skin. The discoloration may never fade completely when a lesion occurs below the knee.

➢ Men develop it more frequently and tend to have their first outbreak between 55 and65 years of age. Another peak period for developing nummular dermatitis is between the ages of 15 and 25 years. Women are more likely to develop the condition then.

➢ Rare in children.

Causes

While the cause remains unknown, researchers believe that increased sensitivity plays a role in most cases. Some patients show sensitivity to:

➢ **Mercury.** It is believed that in rare cases, exposure to mercury, which is a common component of dental fillings, can cause nummular dermatitis. Research shows that a few patients with nummular dermatitis only cleared, despite numerous treatments, when all of their mercury-containing fillings were removed. Even handling the materials in a dental office or lab has been shown to cause an outbreak, which leads researchers to believe that inhaling the mercury vapor may be the cause in these patients.

➢ **Rubber, nickel, formaldehyde, or neomycin.** If the patient has an allergy to any of these, the skin will only clear when the substance is avoided**.**

Risk Factors

The following seem to increase the risk of developing nummular dermatitis:

- **Medical condition.** A history of very dry skin (xerosis) or eczema, especially

atopic dermatitis or stasis dermatitis, increases the risk as does having poor blood flow and/or swelling in the legs.

- **Environment.** A low-humidity environment, especially one that also is cold seems to increase the risk as well as worsen existing nummular dermatitis.
- **Injury to the skin.** An insect bite, contact with chemicals, or an abrasion may trigger an outbreak.

➢ **Bacterial skin infection.**

- **Certain medications.** Isotretinoin, a prescription medication used to treat severe acne that proves resistant to other treatments, seems to increase the risk. Some patients who are treated for hepatitis C with interferon develop severe, generalized (widespread lesions on the body) nummular dermatitis.

Duration

- Some patients clear within a year. Others have persistent or recurring lesions for manyyears.
- Lesions that recur after clearing tend to do so at the sites of the original outbreak.

Diagnosis

- **Visual examination.** Diagnosis usually begins with a visual exam of the patient'sskin.
- **Patch testing**

Occupational Dermatitis

Occupational dermatitis is not one specific type of eczema. It is any type of eczema caused by a person's workplace. This distinct classification came about because occupational dermatitis has unique causes and a large number of people develop eczema on the job.

- Chefs often develop occupational dermatitis on their hands. This chef frequently handles garlic and now has allergic contact dermatitis caused by an allergy to diallyl disulfide, a compound found in garlic.

- Cement Workers.

Signs and Symptoms

According to estimates, 5% of men and 10% of women in the workforce develop eczema on their hands from workplace exposure. Most often this occurs when something that touches the skin causes irritation (irritant contact dermatitis) or an allergic reaction (allergic contact dermatitis). Occupational dermatitis also frequently develops on the forearms and face. Signs and symptoms of occupational dermatitis include:

- Dry, chapped skin (mild case)
- Raw and irritated-looking skin (more severe)
- Redness, swelling, scaly skin, wearing away of the top layers of skin, cracks, blisters,and skin ulcers (more severe)
- Itching, burning, and/or stinging of the affected skin
- If the condition persists for some time, the skin may thicken

Anyone who has frequent exposure to substances that can irritate the skin or who uses strong chemicals on the job can develop occupational dermatitis. With frequent use, even substances as mild as water and detergent can irritate the skin and cause eczema.

Causes

The causes of occupational dermatitis are many and often that more than one cause plays some role. Leading causes include:

- Repeat exposure to substances that over time irritate the skin.
- Long-term exposure to a substance that over time becomes an allergen (substance towhich the person is allergic).
- Airborne particles that become trapped against the skin, such as under the collar orbeneath the waistband.
- Harsh chemical(s) touches the hands or saturates the clothes, causing eczema.
- Working with chemicals that become toxic when exposed to sunlight. Most commonamongst roofers and agricultural workers.

Risk Factors

- **Occupation.** People in certain occupations have a higher risk. A study of 42,839 patients with contact dermatitis found that about 27% of these people developed eczema from on-the-job exposure. Five occupations - housekeeper, bricklayer, worker in the metallurgic or mechanical industry, hairdresser, and health-care worker — were responsible for more than 60% of these cases.
- **Industry.**Working in some industries, especially agriculture and manufacturing,increases the risk.
- **Age.** Susceptibility decreases with age.
- **Gender.** Women seem to have an increased risk and more intense reactions.
- **Atopic condition.** Persons who have a history of atopic dermatitis, a type of eczema,have an increased risk of developing hand dermatitis, especially if they frequently immerse their hands in water while at work.
- **Environment.** Repeatedly wetting and drying the hands damages the skin's protective barrier, making it easier for irritants and allergens to penetrate the skin. By contrast, a low-humidity environment also can damage the skin's protective barrier, making it more susceptible to irritants and allergens.

Duration

- Occupational dermatitis can become chronic (long-lasting) if the irritants or allergenscontinue to contact the skin and the condition is not effectively treated.
- Even the slightest exposure can trigger a flare-up once the skin clears.

Seborrheic Dermatitis

Usually beginning on the scalp as oily, waxy patches, this common type of eczema sometimes spreads to the face and beyond. A severe case, while rare, produces widespread lesions. Like most types of eczema, seborrheic dermatitis tends to flare in cold, dry weather.

Other Names

- Seborrheic eczema
- Cradle cap (occurs in infants aged 0 to 6 months)
- Dandruff
- Seborrhoea

Signs and Symptoms

Signs and symptoms can vary from day to day and include:

- Oily, waxy appearance to the skin
- Flaking skin with scale that ranges in color from white to yellowish brown
- Reddish, somewhat swollen patches of skin — often resembling atopic dermatitis(another type of eczema) or psoriasis
- Patches can appear on these areas of the body: scalp, hairline, upper lip, beneath theeyebrows, inside and behind the ears, eyelids, creases near the mouth, around the nose, armpits, groin, navel, buttocks, underneath the breasts, and upper back. These areas contain oil-producing glands called sebaceous glands.
- Skin may itch constantly. Itching and burning are most common when a skin infectiondevelops. When the skin is infected, skin becomes extremely inflamed and itchy.
- If severe, widespread patches are seen.
- Develops in all races
- Tends to begin during infancy (newborn to 6 months), puberty, or between 40 and 70years of age. After 6 months of age, the condition rarely appears before puberty. When seborrheic dermatitis begins during infancy, it usually clears by 9 to 12 months of age.

Causes

While the exact cause is not known, researchers believe that a number of factors interact to cause seborrheic dermatitis. These factors include the genes, yeast that normally live on human skin, stress, climate, and overall general health.

Risk Factors

The following tend to increase the likelihood of developing seborrheic dermatitis:

- A family history of eczema
- Having oily skin or hair
- Stress
- Fatigue
- Cold, dry climate
- Gender: Males tend to develop more often and have more severe cases
- Obesity
- Injury to the skin, such as an abrasion or scratch
- Using lotions or other topicals that contain alcohol
- Having acne, rosacea, psoriasis, or blepharitis (inflammation of the eyelid)
- Some medical conditions (Parkinson's disease, human immunodeficiency virus (HIV),and recovering from a stroke or heart attack) increases the risk significantly. Estimates indicate that as many as 90% of HIV-infected individuals develop seborrheic dermatitis.
- Taking certain medications, including interferon-a, lithium, and psoralen, significantlyincreases one's risk.

Duration

- **Infants.** The condition usually clears on its own over a period of weeks or months but may return at puberty.
- **Adults.** Seborrheic dermatitis is often chronic, flaring periodically and without warning

Stasis dermatitis

Signs and Symptoms

Stasis dermatitis can begin so slowly that it is barely noticeable or so rapidly that it seems to develop overnight. Signs and symptoms include:

- Swelling in one or both lower legs. In severe cases, the swelling can include the footand extend to just beneath the knee.

- Leg pain
- Thin and inflamed skin
- Itching (can be severe)
- Open sores that can be painful and heal slowly
- Patches of skin can be dry and scaly or ooze
- Reddish brown discoloration of the skin
- Honey-colored crusting when the skin becomes infected
- Skin thickens and darkens with repeated scratching and rubbing
- Violet-colored lesions may appear on lower legs and tops of the feet
- As poor circulation leads to stasis dermatitis, this type of dermatitis typically developsin people who are middle-aged or older. In the United States, about 15 - 20 million people over 50 years of age have stasis dermatitis.
- Rarely occurs before 40 years of age.
- Females are slightly more likely than males to develop the condition.

Causes

Poor circulation in the lower legs leads to stasis dermatitis. One of the primary causes of poor circulation is advancing age. A deep vein thrombosis, surgery, or injury that damages the veins in the lower leg also can cause stasis dermatitis.

Risk Factors

The risk of developing stasis dermatitis increases with advancing age and the following:

- Varicose veins
- Blood clot, including deep vein thrombosis
- High blood pressure
- Sedentary lifestyle
- Obesity
- Heart condition, such as congestive heart failure (a weakened heart cannot pump blood effectively)
- Kidney failure

People who develop stasis dermatitis have an increased risk of developing other medical conditions, including contact dermatitis (a common type of eczema) and cellulitis (a skin infection that extends deeper than the surface of the skin).

Duration

Stasis dermatitis often is a long-term condition that requires care even when the skin clears.

Diagnosis

Diagnosis begins with a complete medical history and visual examination of the skin. The following tests may be ordered because another skin condition can be present and effective treatment includes improving the circulation in the lower legs:

- Blood tests
- Doppler testing to evaluate blood flow to the legs
- Patch testing to determine if the patient has developed an allergy(ies) that causes theskin to react
- Biopsy of the affected skin.

Investigation of Eczema

Patch test

Patch tests detect type IV (delayed or cell-mediated) hypersensitivity. It is common practice for a battery of around 20 common antigens, including common sensitizers such as nickel, rubber and fragrance mix to be applied to the skin of the back under aluminium discs for 48 hours.

They are done in cases of contact dermatitis to establish the etiological agents. The back or the arms are the sites of choice. The affected part is cleaned with water and allowed to dry. Patches are placed at distance of 2 to 3 inches in rows. The reading should be taken 20 min to 1 hrs after removal of patches. The sites are then examined for a positive reaction 24 hours later and possible again a further 24 hours later.

The positive test is revealed by the development of an eczematous patch with erythema swelling and vesicles at the site of application.

Patch test reaction is graded in the following degrees

+ - Only redness

++ - Marked redness and swelling

+++ - Marked redness, swelling and papules

++++ - Redness, oedema and vesicles

Specific IgE

Specific IgE levels to antigens can be measured in serum by a specific radio allergic sorbent test (RAST)

These are occasionally performed to support diagnosis of atopic eczema and to determine specific environmental allergens, eg, pet dander, horse hair, house dust mite, pollens and foods.

Prick tests

Prick tests are a way of detecting cutaneous type I (immediate) hypersensitivity to various antigens such as pollen, house dust, mite or dander.

Bacterial and viral swabs for microscopy and culture

These are useful tests in suspected secondary infection. Skin swabs for bacteriological assessment will invariably reveal the presence of bacteria. In the case of recurrent impetigo in a child with atopic eczema, bacterial swabs should be taken from carrier sites (axillae and groin) from both the affected individual and house hold members.

Intradermal test for allergies to foods, inhalants and drugs

The skin condition in which these tests are helpful are: Urticaria, endogenous eczema, atopic dermatitis and drug sensitivity.

Hints of diagnosis for all eczema

1.Nature of the lesions- size, shape, itching, number of papules, pustules, erythema etc.,

2.Distribution – sites of lesion.

3.History of occupation.

4.History of exposure to allergens – i.e. Chemicals, plants, soap, etc.,

5.Personal and family history of such diseases – e.g atopic or allergic eczemas.

6.Cimate – eg: Dyshidrosis occurs at the change of seasons particularly in spring, summer.

7.Patch tests (allergy test) in allergic/atopic eczemas.

8.Biopsy in rare cases when the lesions do not respond to treatment.

Prognosis of eczema

Dermatitis and eczema are as rule curable conditions. Eczema are ineffective except when they leave scars. The patient needs reassurance of these points.

It must be remembered that epidermis is an ectodermal structure and so takes time to heal. Energetic treatment is to be strongly discouraged. Acute eczemas heal readily in about 1-4 weeks with treatment. Chronic eczemas in which anatomical and functional changes set in take time to disappear.

Disseminated and generalized eczemas are not only slow to heal, but are accompanied by ill health. Infantile and atopic eczemas are trouble some and uncomfortable. The former lasts till the age of twenty five or even through out life. Its course is marked by spontaneous remissions and exacerbations.

Psychogenic stresses, climate extremes and poor health aggravate eczema. The cure of these conditions is retarded in tropical countries by heat, humidity and the prevalent unhygienic conditions.

General lines of managements

1.Explantion and reassuring the patient.

2.Psychotherapy – counseling and antidepressants, mild sedatives, learn to live with it, anger and frustration avoided.

3.Correcting or eliminating the aetiological factors.

4.Exposure to sunlight or extremes of climate to be avoided. Change of place or A/C advised.

5.Scratching and rubbing to be avoided, the nails to be cut short.

6.The health of the patients is improved by multivitamins, iron, protein.

7.Be aware of any foods that may cause an outbreak and avoid those foods.

8.Avoid harsh soaps, detergents, and solvents.

9.Avoid environmental factors that trigger allergies eg., pollens, moulds, mites, and animal dander.

10.Rest to the affected part or bed rest for generalized eczemas.

11.Protection of the affected part – cotton bandage, glove or mask.

12.The patients should have a warm bath in winter and a cold bath in summer. After the bath, he should blot himself with a smooth towel and avoid rubbing.

13.Not to fatigue himself either physically or mentally.

14.Healthy hobbies and play should be encouraged.

Differential diagnosis:

Psoriasis	:	Patches of erythema with silvery scales, typical distribution, little oozing and itching, pinpointbleedingon removing scales
Pityriasis rosea	:	Herald patch, medallion – like lesions on back with scales pointing towards the centre, distribution along the ribs, limited course of 6- 12 weeks.
Tinea corporis	:	Well – defined macules, inflammatory border and central clearing,marked itching, Microscopic examination shows fungal hyphae
Erysipeals	:	Patient ill, temperature raised, pulse rate increased, face - angry red colour, hot and firm, margin are raisedand well defined polymorphonuclear leucocytosis
Lichen Planus	:	Polyhedral, firm violaceous, flat – topped papules with wickham’sstriae and very thin adherent scales distribution on the flexorsgenitalia and mouth, pruritus and a chronic course

MATERIALS AND METHODS

To study on clinical evaluation of "VADHA KARAPPAN" with drug AMIRTHA KANDHI KUKKIL VALLADHI (Internal) and SIVAPPU ENNAI(External) was carried out in PostGraduate Sirappu Maruthuvam Government Siddha Medical College, Palayamkottai.40 patients of both male and female are selected for study and admitted in IPD and OPD of 40 cases.

SELECTION OF PATIENTS:

1.Age: between 20 years and 60 years

2. Sex: Both Male and Female

3. Erythematous plaques, itching , scaling, oozing, vesicles, Lichenification

4.Occupational history

5.History of exposure to allergens

6. Personal and family history of bronchial asthma, hay fever, eczema

7.Willing to participate in trial and signing consent by fulfilling the conditions of Proforma

8.Willing to give blood sample for laboratory investigations

9.Willing to take photograph before and after treatment

10.Willingness to participate in this study with the knowledge of potential risks

12.Able to provide written informed consent and to comply with all study procedures.

EXCLUSION CRITERIA:

- Evidence of skin disease other than eczema
- Diabetes mellitus
- Hypertension and cardiac disease
- Narcotic addicts
- Pregnancy and lactation
- Patients with any other serious illness
- Photo sensitive drug eruption
- Immune compromised Patients
- Children, elderly and HIV patients

WITHDRAWAL CRITERIA

- Intolerance to the drug and development of adverse reactions during drug trial
- Poor patient compliance and defaulters
- Patient turned unwilling to continue in the course of clinical trial.
- Occurrence of any serious illness

Evaluation of clinical parameters

During admission the detailed clinical history was taken from the patients. The cardinal signs & symptoms like itching, erythema, vesicles, oozing, pain, oedema, crusting, scaling and ulcers were also taken as criteria for the Vatha karappan cases.

A detailed clinical history was taken by regarding the following signs and symptoms.

- Duration of Illness
- Family History
- Itching
- Oozing
- Pre disposing factors

Siddha diagnosis was made with the help of the following criteria

A case sheet was prepared on the basis of siddha methodology

- Poriyal arithal
- Pulanal arithal
- Vinathal
- Envagai thervugal
- Ezhu udal kattugal
- Thinai

Besides an individual case sheet was maintained for each case in ward. In modern system of medicine the following investigations were done

Skin Examination

- Site -
- Colour -
- Size -
- Shape -
- Border -
- Itching -
- Erythema -
- Macule -
- Papule -

ROUTINE LABORATORY INVESTIGATION

1. Hematological Investigation

- Total WBC count
- Differential WBC count
- Erythrocyte sedimentation rate (ESR)
- Haemoglobin Percentage (Hb%)
- Blood Sugar
- Blood Urea
- Serum cholesterol
- VDRL

2. Urine Analysis

- Albumin
- Sugar
- Deposits

3. Stools Examination

- Ova
- Cyst
- RBC & Pus cells

4. Skin

- Scrapping test for fungus

Selection of Medicines

Selection of medicines was made after the in depth study of various siddha literatures.

Management

As Vadham is the outcome of this disease virasanam is advised in the first day beforestartingthe trail drug Kowsigar kulambu-160mg od at early morning.Next day onwards trail drug is given.

Trial Drugs

Internal medicine

Amirtha kanthi kukkil valladhi– 500 mg (tds)

Ref: Agathiyar Vaithiya valladhi 600

External medicine:

Sivappu ennai**Ref: Sirappu Maruthuvam**

Assessment

1. Biochemical analaysis of the medicines selected for the study were done at the Bio – Chemistry Department Government siddha medical college, Palayamkottai .
2. Preparation and properties of the medicines, bio – chemical analysis, pharmacological analaysis of above medicines are described in annexure.
3. Required information was collected from each patient by using the forms mentioned in protocol.
4. The clinical assessments for In- patients was made daily and recorded.
5. The clinical assessments for out- patients were recorded regularly in each visit.

6. A separate case sheet was maintained for each and every patient
7. The laboratory investigation was done before and after treatment and recorded in the appropriate form.
8. All the patients were screened for side effects and adverse effects.
9. The outcome is assessed by the reduction of symptoms are noted
10. All the patients were advised for the further follow up.
11. All the patients were advised diet restrictions, yogasanas and meditation.

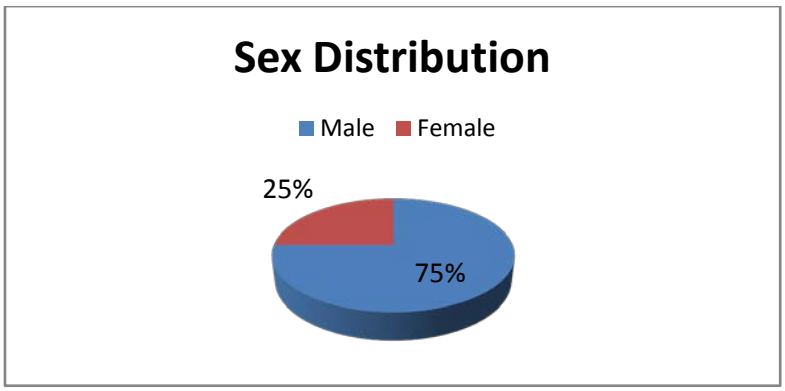
OBSERVATION AND RESULTS

Results were observed with respect to the following criteria

- Sex distribution
- Age distribution
- Occupational status
- Socio economical status
- Diet reference
- Seasonal reference
- Thinai reference (land and place)
- Mode of onset
- Precipitating factors
- Clinical features
- Associated history
- Incidence of upper and lower limbs
- Duration of the illness
- Distribution of Uyir thathukkal
- Ezhu (seven) udar kattugal reference
- Envagai thervugal
- Results after treatment

1.Sex Distribution

S.No	Sex	No.of causes	Percentage
1.	Male	30	75
2.	Female	10	25



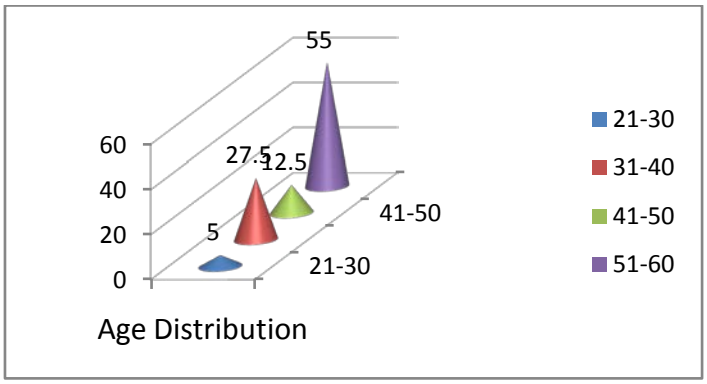
Inference

During this study, 40 patients of vadha karappan were selected from OPD and IPD. Most of them were males.

2. Age Distribution

.S.No	Age	No.of cases	Percentage
1.	21-30	2	5
2.	31-40	11	27.5
3.	41-50	15	12.5
4.	51-60	21	55

Age Distribution



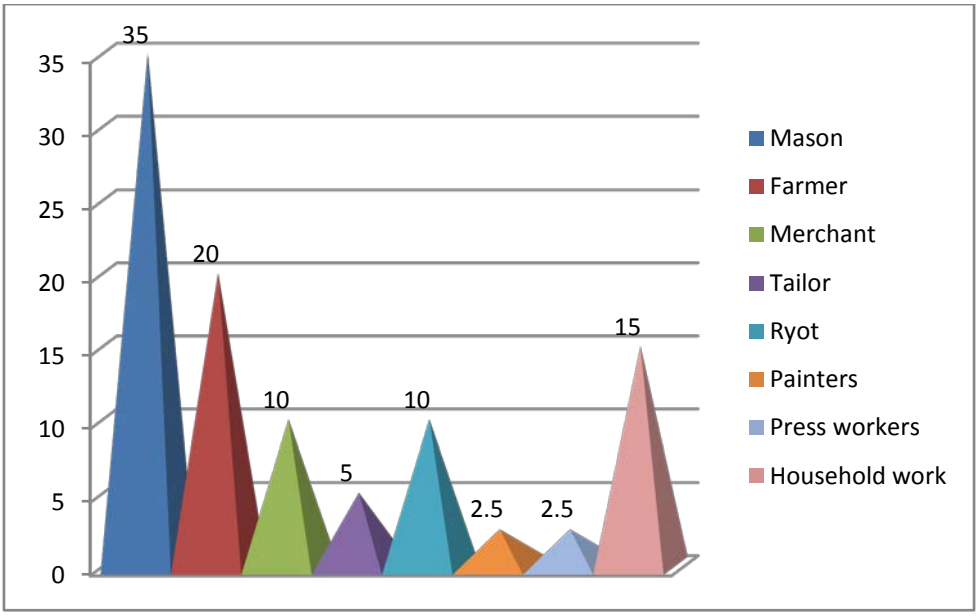
Inference

Out of 40 cases, most of the cases are above 50 years

3.Occupational status:

S.No	Nature of work	No.of.cases	Percentage
1.	Mason	14	35
2.	Farmer	8	20
3.	Merchant	4	10
4.	Tailor	2	5
5.	Ryot	4	10
6.	Painter	1	2.5
7.	Press workers	1	2.5
8.	Household work	6	15

Occupational status



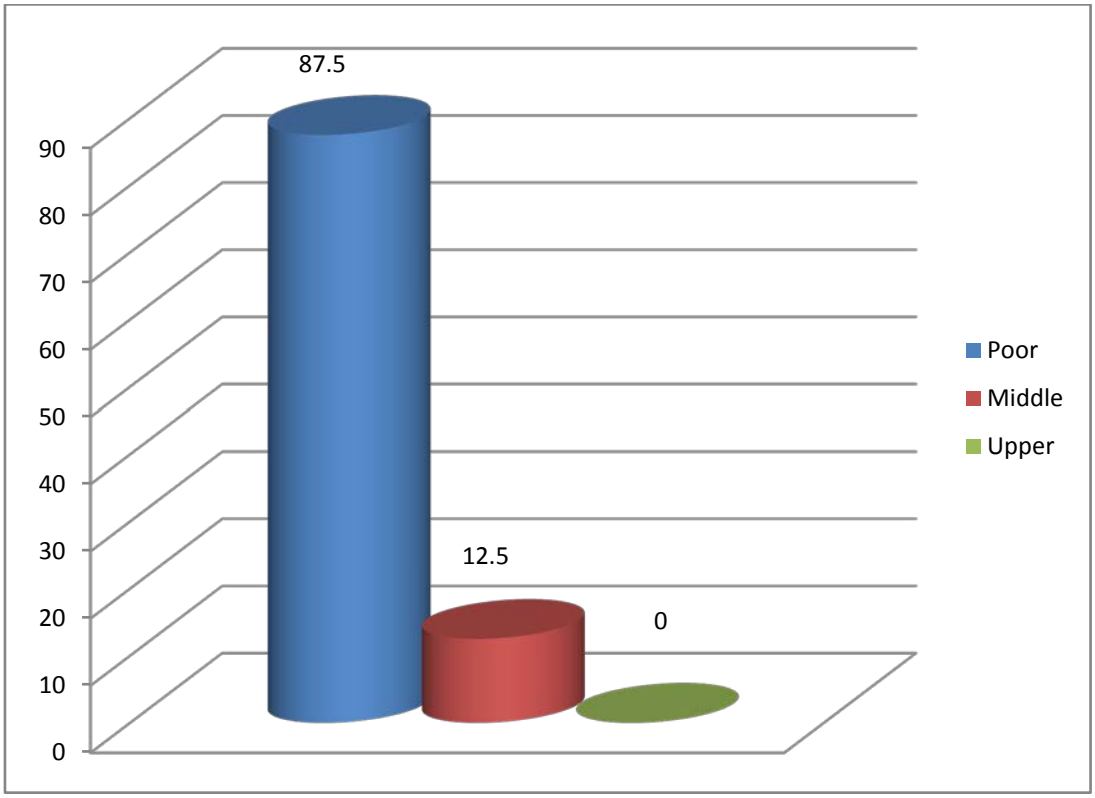
Inference

Occupation is closely related to vadha karappan.Majority of the patients were Mason

4. Socio-economic status

S.No	Socio- economic status	No.of. cases	Percentage
1.	Poor	35	87.5
2.	Middle	5	12.5
3.	Upper	-	-

Socio- economic status

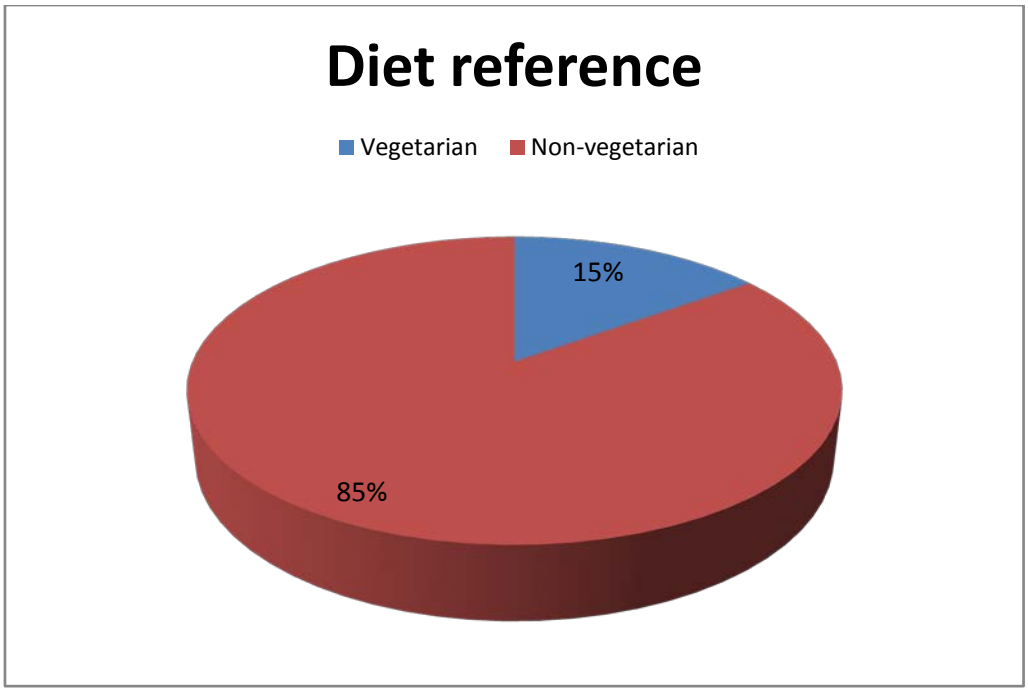


Inference

The incidence of the disease was found to higher in lower economic groups.

5.Diet reference

S.No	Diet habit	No.of cases	Percentage
1.	Vegetarian	6	15
2.	Non-vegetarian	34	85

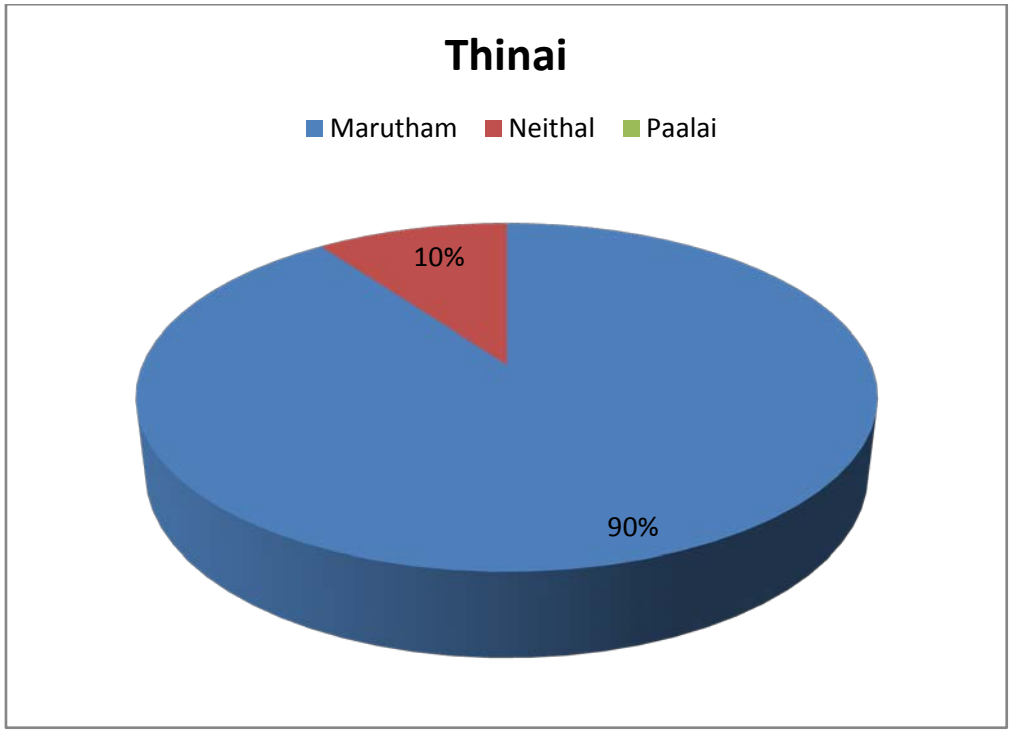


Inference

It was noted that cases were mostly on non vegetarian diet.

6.Thinai reference

S.No	Type of land	No.of cases	Percentage
1.	Kurinji	-	-
2.	Mullai	-	-
3.	Marutham	36	90
4.	Neithal	4	10
5.	Paalai	-	-

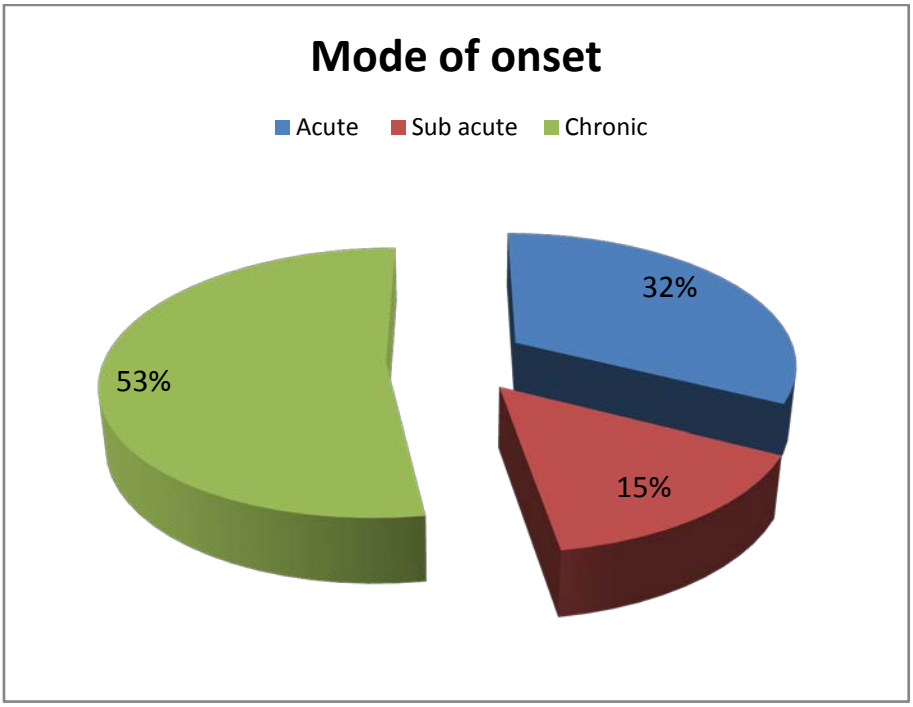


Inference

Out of 40 cases, most of them reside in Marutha nilam

7.Mode of onset

S.No	Mode of onset	No.of cases	Percentage
1.	Acute	13	32.5
2.	Sub acute	6	15
3.	Chronic	21	52.5

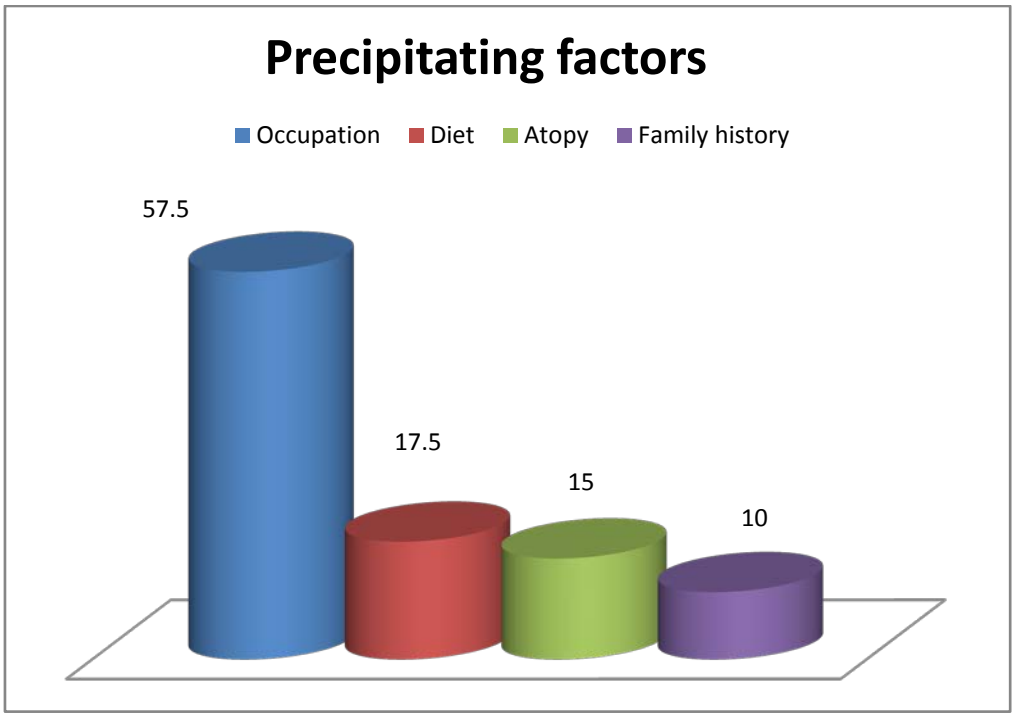


Inference

Out of 40 cases, 52.5% of cases were of chronic course.

8.Precipitating factors

S.No	Precipitating factors	No.of cases	Percentage
1.	Occupation	25	57.5
2.	Diet	7	17.5
3.	Atopy	6	15
4.	Family history	4	10



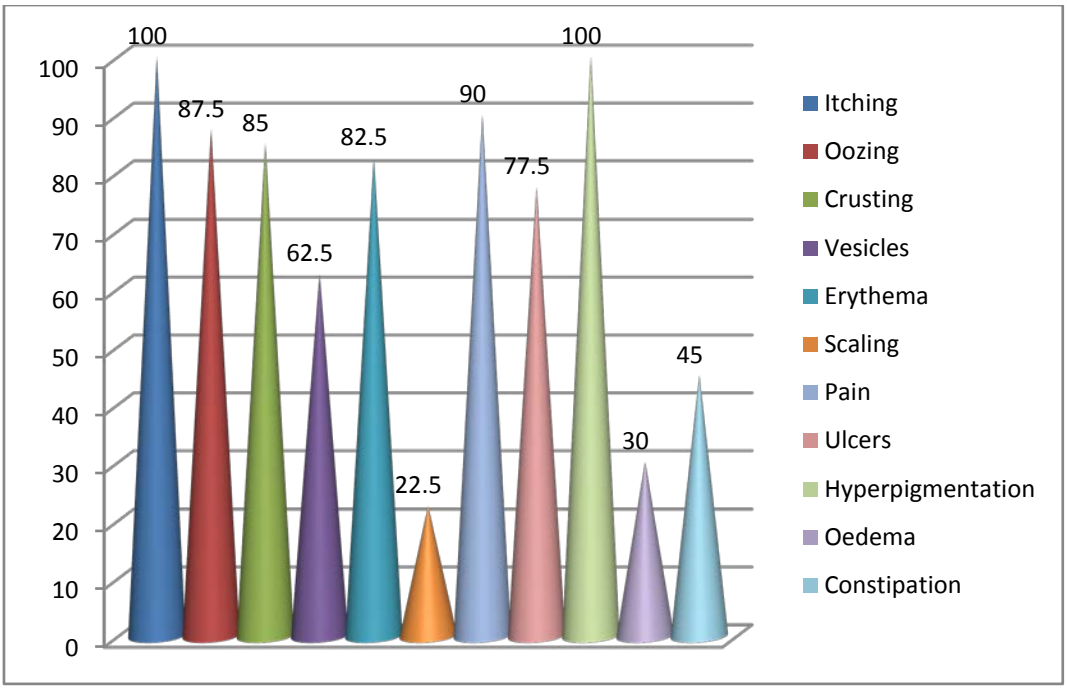
Inference

Occupation, atopy and diet play a vital role in the incidence of this disease.

9.Clinical features

S.No	Clinical features	No.of cases	Percentage
1.	Itching	40	100
2.	Oozing	35	87.5
3.	Crusting	34	85
4.	Vesicles	25	62.5
5.	Erythema	33	82.5
6.	Scaling	9	22.5
7.	Pain	36	90
8.	Ulcers	31	77.5
9.	Hyperpigmentation	40	100
10.	Oedema	12	30
11.	Constipation	18	45

Clinical features



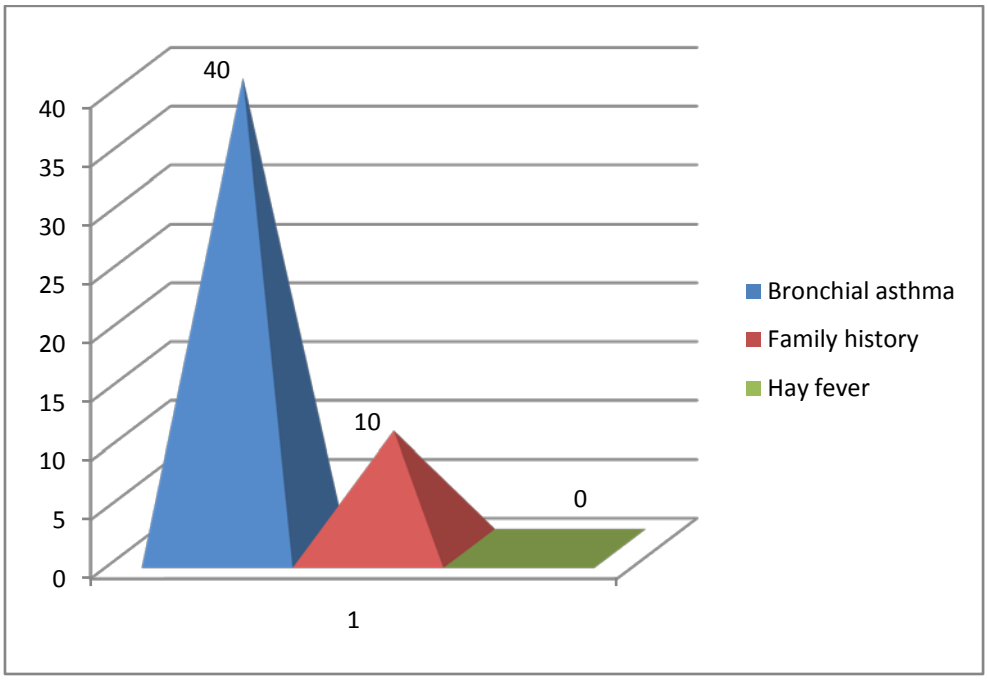
Inference

Regarding signs and symptoms of vadha karappan patients, all of them have itching and hyperpigmentation.

10.Associatedhistory

S.No	History	No.of Cases	Percentage
1.	Bronchial asthma	16	40
2.	Family history	4	10
3.	Hay fever	-	0

Associated history



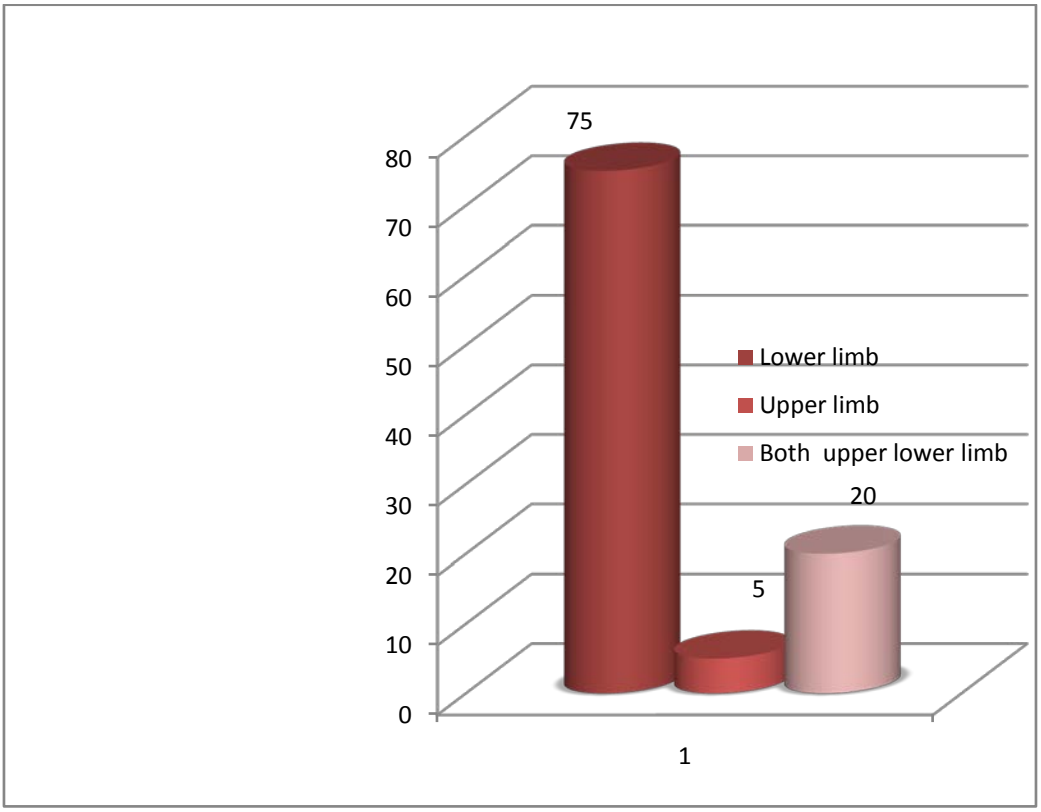
Inference

There is a close association between vadha karappan with bronchial asthma and other family history

11. Incidenceof upper, lower limbs

S.No	Incidence	No.of.Cases	Percentage
1.	Lower limb	30	75
2.	Upper limb	2	5
3.	Both upper and lower limb	8	20

Incidence of upper, lower limbs



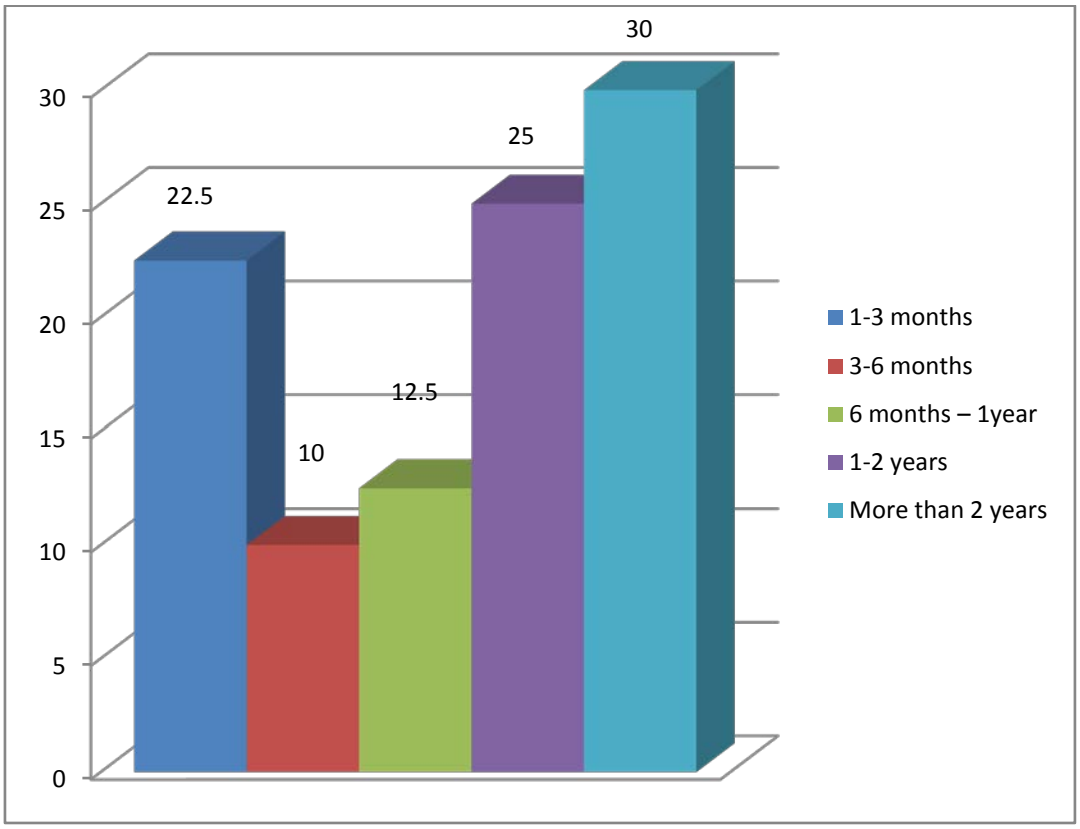
Inference

In vadha karappan patients,lower limb is mostly involved.

12. Duration ofillness

S.No	Duration(in months)	No.of cases	Percentage
1.	1-3 months	9	22.5
2.	3-6 months	4	10
3.	6 months – 1year	5	12.5
4.	1-2 years	10	25
5.	More than 2 years	12	30

Duration of illness



Inference

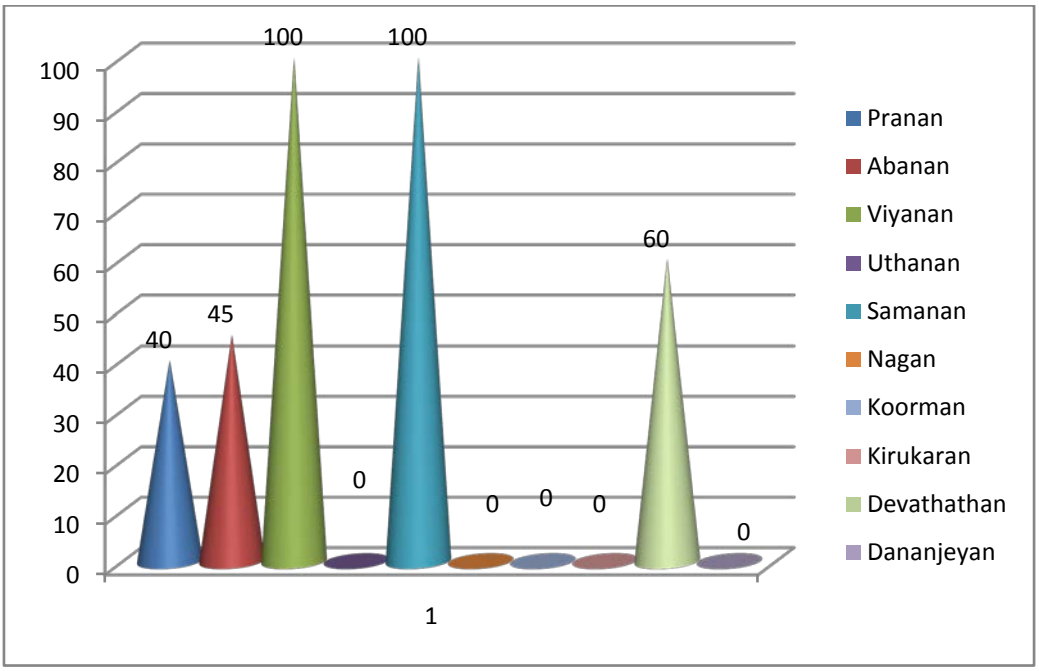
Most of the vadha karappan patients have a chronic course.

13.Distribution of Uyirthadukal

Derangement ofvatham

S.No	Vatham	No.of.cases	Percentage
1.	Vatham	16	40
2.	Abanan	18	45
3.	Viyananan	40	100
4.	Uthanan	-	-
5.	Samanan	40	100
6.	Nagan	-	-
7.	Koorman	-	-
8.	Kirukaran	-	-
9.	Devadhathan	24	60
10.	Dananjeyan	-	-

Derangement of vaatham



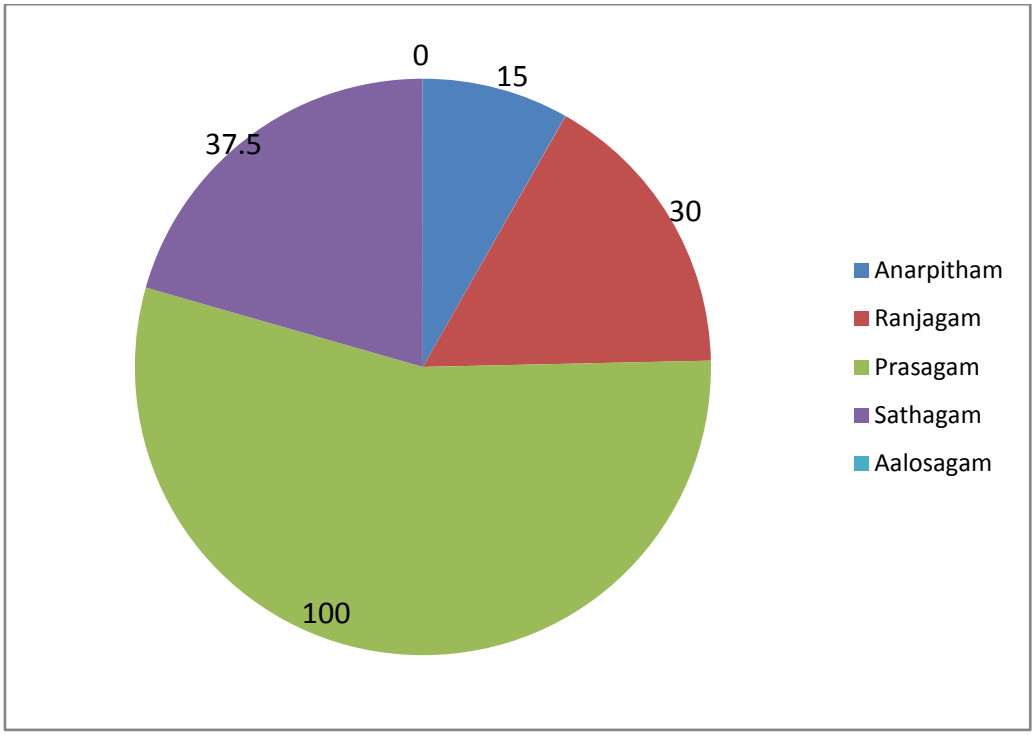
Inference

In all Vatha karappan viyanan and samanan are affected

14.Derangements of pitham

S.No	Pitham	No.of.cases	Percentage
1.	Anarpitham	6	15
2.	Ranjagam	12	30
3.	Prasagam	40	100
4.	Sathagam	15	37.5
5.	Aalosagam	-	-

Derangements of pitham



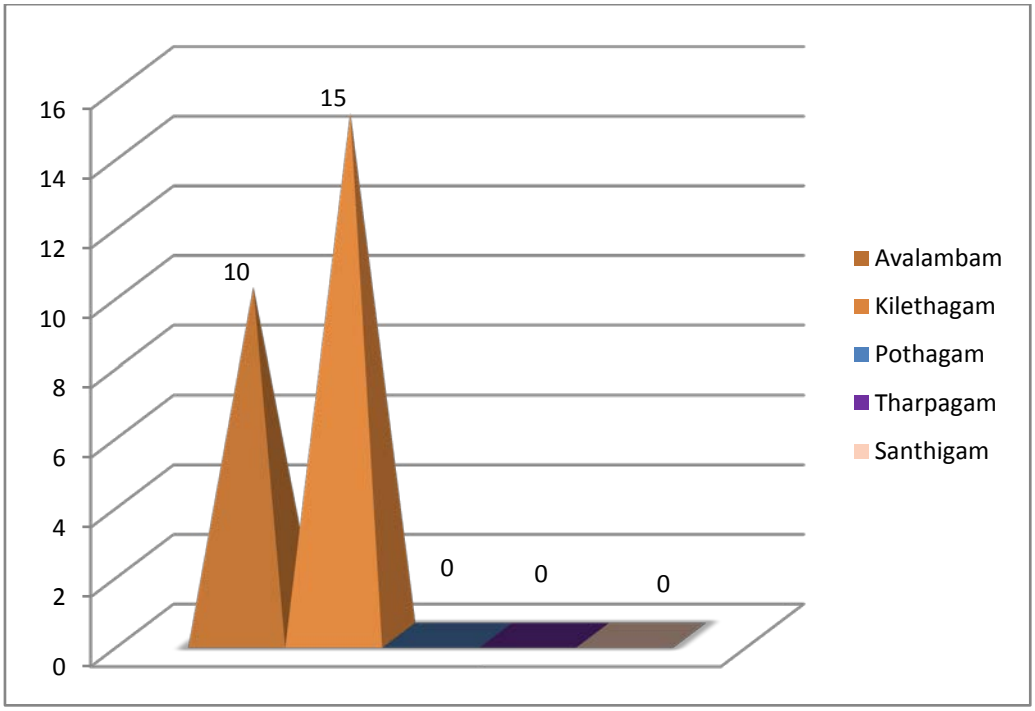
Inference

Prasagam is affected in all vatha karappan patients

15.Derangement of Kabam

S.No	Kabam	No.of Cases	Percentage
1.	Avalambam	4	10
2.	Kilethagam	6	15
3.	Pothagam	-	-
4.	Tharpagam	-	-
5.	Santhigam	-	-

Derangement of Kabam



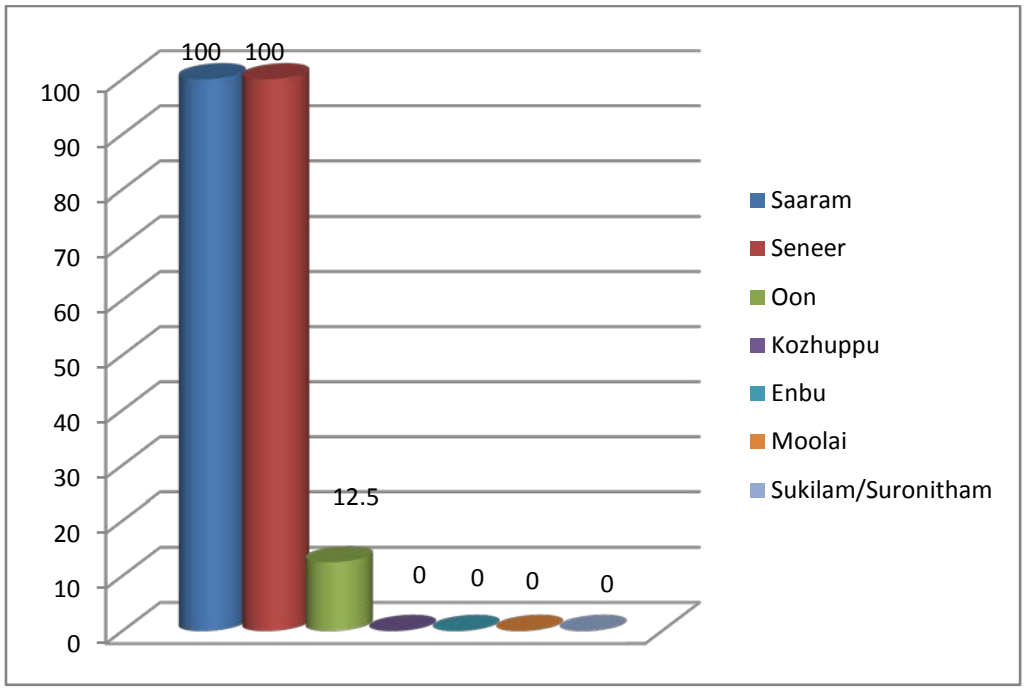
Inference

Kilethagam is affected in 15% of patients

16.UdalKattukal

S.No	Udalkatukal	No.of.cases	Percentage
1.	Saaram	40	100
2.	Seneer	40	100
3.	Oon	5	12.5
4.	Kozhuppu	-	-
5.	Enbu	-	-
6.	Moolai	-	-
7.	Sukilam/Suronitham	-	-

UdalKattukal



Inference

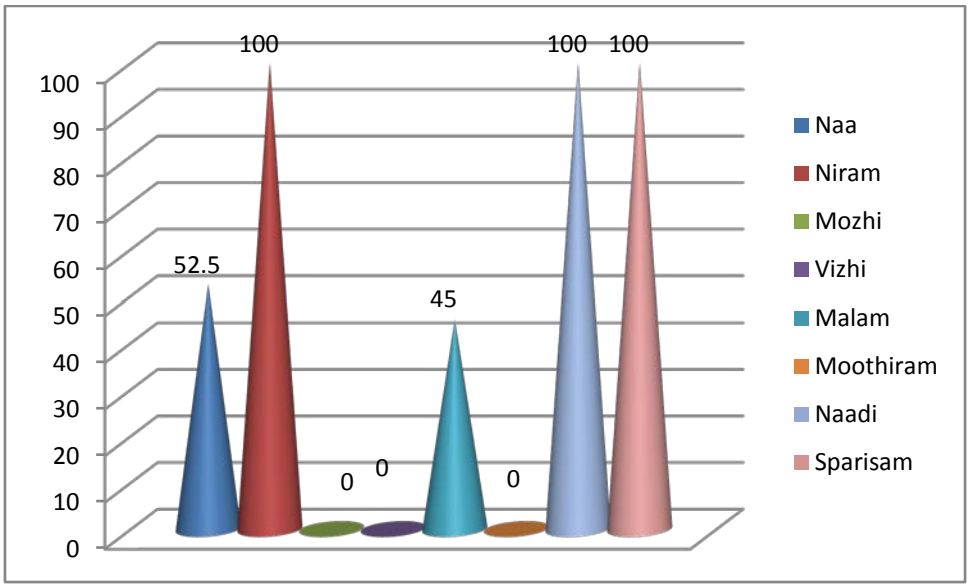
Saaram, seneer are affected in almost all cases.

17.Envagaitheruvgal

Siddha system of medicine includes eight diagnostic tools to diagnose a disease.

S.No	Type of investigation	No.ofCases	Percentage
1.	Naa	21	52.5
2.	Niram	40	100
3.	Mozhi	-	
4.	Vizhi	-	-
5.	Malam	18	45
6.	Moothiram	-	-
7.	Naadi	40	100
8.	Sparisam	40	100

Envagaitheruvgal



Inference

Niram, Naadi, Sparisam are affected in all cases

18.Results after treatment

S.No	Results	No.of.cases	Percentage
1.	Good	25	62.5
2.	Better	13	32.5
3.	No improvement	2	5

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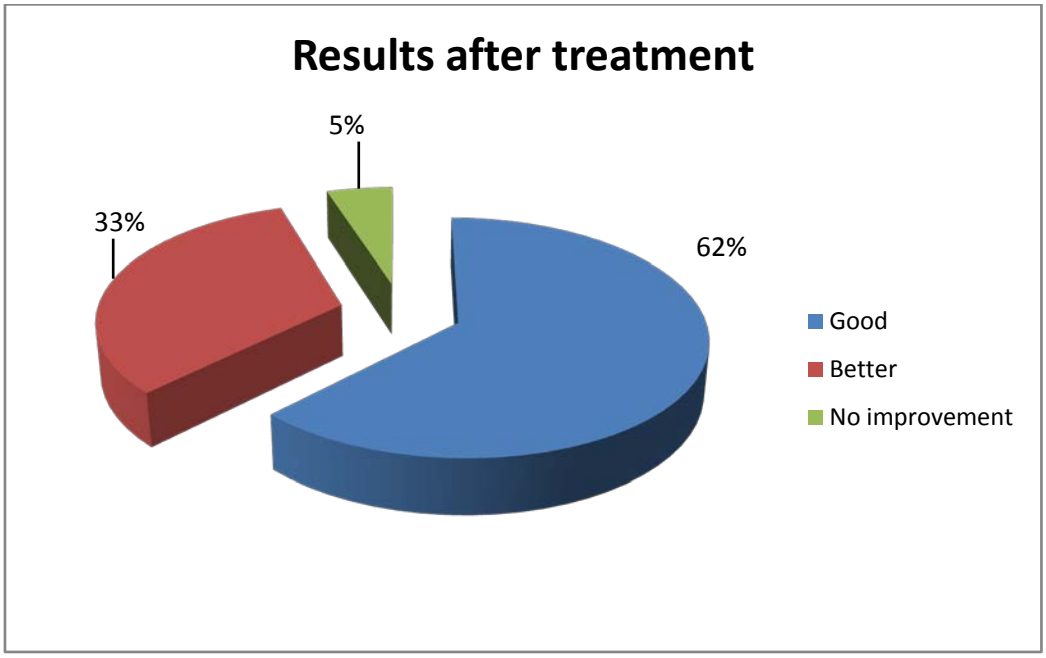

Inference

Out of 40 cases 62.5% of cases showed good improvement

CASE SUMMARY OF OUT PATIENT

S.No	OP.No	Name	Age/Sex	Complaint				No.of days	Result
				IT	O	VP	P		
1.	67703	Kumar	40/M	+	+	+	+	25	MR
2.	65416	Manzoor	62/M	+	+	-	-	30	GR
3.	63307	David	38/M	+	-	-	+	26	GR
4.	59758	Masilamani	59/M	+	+	+	+	32	GR
5.	64243	Sankaran	60/M	+	+	+	+	45	GR
6.	62488	Velu	56/M	+	+	+	+	28	MR
7.	58332	Ramasamy	60/M	+	+	-	-	26	GR
8.	69372	Kasithangam	60/F	+	+	-	-	28	GR
9.	83688	Thangavel	41/M	+	+	+	+	25	MR
10.	75489	Selvi	33/F	+	+	+	-	15	MR
11.	75320	Thangapazhamammal	57/F	+	+	-	-	19	MR
12.	73057	Ravi	58/M	+	+	+	-	24	GR
13.	81782	Murugan	36/M	+	-	+	+	28	GR
14.	81587	Kanagasabapathy	60/M	+	+	+	-	30	GR
15	79003	Priya	50/F	+	+	+	+	32	MR
16.	83526	Paulraj	35/M	+	+	+	+	28	MR
17.	88257	Lakshmanan	57/M	+	-	-	+	25	GR
18.	87083	Murugan	32/M	+	+	-	+	28	GR
19.	75574	Ramakrishnan	32/M	+	+	+	+	20	GR
20.	93161	Iyadurai	58/M	+	-	+	-	25	MR
21.	94211	Azhaguperumal	34/M	+	+	-	-	40	GR
22.	80306	Lakshmi	60/F	+	+	-	-	35	MR
23.	70732	Sudalaikani	52/M	+	+	+	+	40	MR
24.	78551	Muniyasamy	54/M	+	+	+	+	26	MR
25.	69309	Ramkumar	38/M	+	+	-	-	35	GR

IT-Itching, O-Oozing, VP-Vesiculo papules, P-Pain

GR-Good result, MR-Moderate result

CASE SUMMARY OF INPATIENTS

S.No	IP. No.	Name	Age / Sex	Date of admission	Date of Discharge	No of Days Treated	Treatment	Result
1.	3320	Kumara vadivoo	60/F	16.8.12	28.8.12	12	Amiratha kandhi Kukkil Valladhi 500 mg(tds) Internal Sivappu ennai External	NI
2.	3896	Saroja	35/F	3.9.12	26.9.12	23		GR
3.	3058	Ayyanar	53/M	14.9.12	30.9.12	16		MR
4.	3240	Murugan	30/M	26.9.12	12.9.12	16		GR
5.	3359	Pitchammal	55/F	1.10.12	15.10.12	15		MR
6.	3555	Anthony	60/M	12.10.12	25.10.12	13		GR
7.	3521	ThangaNaadar	58/M	11.10.12	30.10.12	19		GR
8.	3239	Micheal	43/M	26.09.12	18.11.12	22		GR
9.	4221	Subbiayah	60/M	10.12.12	24.12.12	14		GR
10	3946	Chinnappan	58/M	20.11.12	2.12.12	12		GR
11.	3894	Nambi	56/M	17.11.12	30.11.12	13		GR
12.	3999	Chinnathaai	55/F	22.11.12	14.12.12	22		NI
13.	4068	Maadasamy	35/M	29.11.12	14.12.12	15		GR
14.	3264	Ramakrishnan	32/M	27.09.12	12.10.12	15		GR
15.	3320	**Vedhamanikkam**	60/M	28.09.12	7.10.12	10		MR

GR-Good result MR-Moderate result NI-No improvement

INVESTIGATIONS OF OP & IP PATIENTS

S. No	IP. No./ OP. No	TC cells / comm. BT	DC			TC cells/ cumm				ESR mm/hr				Hbgm%		BT			AT			Skin scrapping for fungus	
			BT in %			AT	AT in %			BT		AT		BT	AT	BS	BU	SC	BS	BU	SC	BT	AT
			P	L	E		P	L	E	½ hr	1hr	½ hr	1hr										
1.	58332	9100	59	39	2	9100	59	39	2	15	51	15	48	12	18	115	21	140	117	21	140	-ve	-ve
2.	59758	8500	68	30	2	8700	69	30	2	20	45	22	46	15	18	120	22	140	119	22	140	-ve	-ve
3.	63307	8500	58	39	3	8600	59	38	3	22	51	19	50	14	18	73	17	130	73	18	130	-ve	-ve
4.	64243	9000	57	29	2	9000	57	27	2	21	52	21	52	16	18	114	23	140	114	23	140	-ve	-ve
5.	62488	8500	65	32	3	8500	64	33	3	15	53	15	51	10	10	96	22	130	96	22	130	-ve	-ve
6.	65416	9200	60	34	2	9200	62	34	2	18	50	18	50	11	11	99	21	140	179	22	140	-ve	-ve
7.	70732	9000	56	35	3	9000	56	31	3	19	48	21	50	11	12	120	22	140	120	22	140	-ve	-ve
8.	67703	9200	57	29	2	9200	57	29	2	22	51	23	54	14	14	124	21	130	124	21	138	-ve	-ve
9.	69372	9000	58	33	5	9000	58	33	3	21	50	21	50	12	12	130	22	140	130	22	140	-ve	-ve
10.	69309	8700	63	34	3	8700	64	33	3	20	48	20	50	18	18	110	21	140	20	21	140	-ve	-ve
11.	73057	8500	52	28	20	8700	58	24	28	10	20	9	16	13	13	132	33	182	120	31	180	-ve	-ve
12.	75320	8300	50	40	10	8200	53	38	9	5	9	6	11	12	12	110	24	195	112	24	198	-ve	-ve
13.	75489	9100	62	29	9	9000	62	29	9	111	19	9	10	10	10	112	26	200	120	28	210	-ve	-ve
14.	75574	8200	58	38	4	8500	60	38	2	51	111	3	8	74	14	90	24	180	114	20	180	-ve	-ve
15.	79003	9200	68	28	4	9200	64	30	4	3	6	5	9	11	11	130	28	20	128	32	160	-ve	-ve
16.	80306	7900	60	36	4	7800	63	33	4	11	30	10	25	115	115	114	32	180	116	30	170	-ve	-ve
17.	81587	7800	63	33	4	7900	60	35	5	2	5	2	5	14	14	120	28	190	124	28	190	-ve	-ve
18.	81782	8000	64	324	2	8100	66	30	4	5	12	5	10	12	12	113	24	184	114	28	192	-ve	-ve

19.	83526	8200	52	46	2	8100	50	46	4	6	9	4	8	14	14	104	28	196	106	28	196	-ve	-ve
20.	83688	9200	66	31	3	9100	68	28	3	4	9	4	9	12	13	106	24	198	115	24	200	-ve	-ve
21.	78551	8500	60	35	5	8600	62	36	2	5	10	6	12	13	13	110	28	200	115	30	190	-ve	-ve
22.	94211	8200	52	28	20	8700	58	24	18	6	9	4	8	14	14	104	24	196	106	28	196	-ve	-ve
23.	93161	9400	64	34	2	9500	66	30	4	3	6	5	9	11	11	120	28	200	128	32	160	-ve	-ve
24.	88259	9000	56	35	3	9100	56	31	3	19	48	21	30	10	10	120	22	140	120	22	140	-ve	-ve
25.	87083	8000	65	33	3	8100	66	30	4	5	12	5	10	12	12	112	24	184	114	28	192	-ve	-ve
26.	2896	8900	64	32	4	9000	66	30	4	3	6	5	9	11	11	104	24	196	106	28	196	-ve	-ve
27.	3240	9100	62	29	9	9000	62	29	9	11	19	9	10	10	10	120	26	200	120	28	210	-ve	-ve
28.	3058	7900	60	36	4	7800	63	33	4	11	30	10	25	11	115	114	32	180	116	30	170	-ve	-ve
29.	3359	8700	64	33	3	8800	66	24	10	80	143	60	123	12	125	110	32	184	114	28	192	-ve	-ve
30.	3555	8200	66	30	4	8300	68	28	4	10	23	5	10	118	12	10	32	184	114	28	192	-ve	-ve
31.	3521	8000	64	32	4	8200	63	33	4	25	50	4	8	106	11	130	30	180	120	31	180	-ve	-ve
32.	3239	8500	52	26	22	8700	58	24	18	10	20	9	16	13	13	132	33	182	120	31	180	-ve	-ve
33.	4221	8700	63	34	3	8700	64	33	3	20	48	20	50	18	8	160	21	140	120	21	120	-ve	-ve
34.	3946	8600	62	31	7	8700	63	34	3	10	21	9	16	115	115	131	30	130	130	30	120	-ve	-ve
35.	3894	9700	59	38	8	9700	58	24	18	10	20	9	16	98	10	89	20	196	90	21	120	-ve	-ve
36.	3999	7600	59	38	3	8200	63	33	4	45	100	60	123	12	12	95	24	196	120	21	140	-ve	-ve
37.	4068	8300	62	35	3	9500	66	30	4	5	12	5	9	13	13	135	33	182	120	31	180	-ve	-ve
38.	3320	8100	64	34	2	8100	64	35	1	20	48	20	50	11	11	160	21	140	120	21	140	-ve	-ve
39.	3264	8900	52	38	10	8800	58	24	18	10	20	9	16	98	10	89	20	196	80	21	120	-ve	-ve
40.	3320	8400	64	33	3	8400	64	33	3	10	20	9	16	13	13	132	33	182	120	31	180	-ve	-ve

TC - Total Count , DC – Differential count, P-Polymorphs L-lymphocytes, E-Eosinophils, HB – Hemoglobin, ESR- Erythrocyte Sedimentation rate BT- Before Treatment AT – After treatment, BS- Blood Sugar, BU – Blood Urea, SC – Serum Cholestrol NAD – no Abnormality detected

URINE AND STOOLS ANALYSIS OF OP /IP PATIENTS

Sl.No	OP/IP No	Urine Analysis								Stool Analysis			
		Before Treatment				After Treatement				Before Treatment		After Treatment	
		Alb	Sug	Dep	Epithelial cells	Alb	Sug	Dep	Epithelial cells	Ova	Cyst	Ova	Cyst
1	58332	Nil	Nil	-	2-3	Nil	Nil	1-2	1-2	Nil	Nil	Nil	Nil
2	59758	Nil	Nil	-	2-3	Nil	Nil	2-3	2-3	Nil	Nil	Nil	Nil
3	63307	Nil	Nil	-	3-4	Nil	Nil	3-4	3-4	Nil	Nil	Nil	Nil
4	64243	Nil	Nil	-	2-3	Nil	Nil	2-3	2-3	Nil	Nil	Nil	Nil
5	62488	Nil	Nil	-	2-3	Nil	Nil	0	1-4	Nil	Nil	Nil	Nil
6	65416	Nil	Nil	-	1-2	Nil	Nil	1-2	1-2	Nil	Nil	Nil	Nil
7	70732	Nil	Nil	-	2-3	Nil	Nil	-	1-2	Nil	Nil	Nil	Nil
8	67703	Nil	Nil	-	2-3	Nil	Nil	-	1-2	Nil	Nil	Nil	Nil
9	69372	Nil	Nil	1-2	-	Nil	Nil	1-2	-	Nil	Nil	Nil	Nil
10	69309	Nil	Nil	-	-	Nil	Nil	-	2-3	Nil	Nil	Nil	Nil
11	73057	Nil	Nil	-	2-3	Nil	Nil	1-2	-	Nil	Nil	Nil	Nil
12	75320	Nil	Nil	-	1-2	Nil	Nil	2-3	-	Nil	Nil	Nil	Nil
13	75489	Nil	Nil	-	3-4	Nil	Nil	2-3	-	Nil	Nil	Nil	Nil
14	75574	Nil	Nil	1-2	-	Nil	Nil	1-2	-	Nil	Nil	Nil	Nil
15	79003	Nil	Nil	1-2	-	Nil	Nil	1-2	-	Nil	Nil	Nil	Nil
16	80306	Nil	Nil	1-2	-	Nil	Nil	1-7		Nil	Nil	Nil	Nil
17	81587	Nil	Nil	-	-	Nil	Nil	-	2-3	Nil	Nil	Nil	Nil
18	81782	Nil	Nil	-	2-3	Nil	Nil	-	2-3	Nil	Nil	Nil	Nil
19	83526	Nil	Nil	2-3	-	Nil	Nil	-	2-3	Nil	Nil	Nil	Nil
20	83688	Nil	Nil	2-3	-	Nil	Nil	1-2	-	Nil	Nil	Nil	Nil

Sl.No	OP/IP No	Urine Analysis								Stool Analysis			
		Before Treatment				After Treatement				Before Treatment		After Treatment	
		Alb	Sug	Dep	Epithelial cells	Alb	Sug	Dep	Epithelial cells	Ova	Cyst	Ova	Cyst
21	78551	Nil	Nil	1-2	-	Nil	Nil	1-2	-	Nil	Nil	Nil	Nil
22	94211	Nil	Nil	1-2	-	Nil	Nil	1-2	-	Nil	Nil	Nil	Nil
23	93161	Nil	Nil	-	2-3	Nil	Nil	-	2-3	Nil	Nil	Nil	Nil
24	88259	Nil	Nil	-	1-2	Nil	Nil	2-3	2-3	Nil	Nil	Nil	Nil
25	87083	Nil	Nil	-	1-2	Nil	Nil	-	1-2	Nil	Nil	Nil	Nil
26	2896	Nil	Nil	-	-	Nil	Nil	-	2-3	Nil	Nil	Nil	Nil
27	3240	Nil	Nil	1-2	-	Nil	Nil	1-2	-	Nil	Nil	Nil	Nil
28	3058	Nil	Nil	-	1-2	Nil	Nil	-	1-2	Nil	Nil	Nil	Nil
29	3359	Nil	Nil	-	2-3	Nil	Nil	-	2-3	Nil	Nil	Nil	Nil
30	3555	Nil	Nil	1-2	-	Nil	Nil	1-2	-	Nil	Nil	Nil	Nil
31	3521	Nil	Nil	1-2	-	Nil	Nil	1-2	-	Nil	Nil	Nil	Nil
32	3239	Nil	Nil	-	1-2	Nil	Nil	2-3	2-3	Nil	Nil	Nil	Nil
33	4221	Nil	Nil	-	1-2	Nil	Nil	-	1-2	Nil	Nil	Nil	Nil
34	3946	Nil	Nil	1-2	-	Nil	Nil	1-2	-	Nil	Nil	Nil	Nil
35	3894	Nil	Nil	1-2	-	Nil	Nil	1-2	-	Nil	Nil	Nil	Nil
36	3999	Nil	Nil	1-2	-	Nil	Nil	-		Nil	Nil	Nil	Nil
37	4068	Nil	Nil	-	1-2	Nil	Nil	-	1'-2	Nil	Nil	Nil	Nil
38	3320	Nil	Nil	1-2	-	Nil	Nil	1-2	2-3	Nil	Nil	Nil	Nil
39	3264	Nil	Nil	1-2	-	Nil	Nil	1-2	-	Nil	Nil	Nil	Nil
40	3320	Nil	Nil	-	2-3	Nil	Nil	2-3	-	Nil	Nil	Nil	Nil

DISCUSSION

The main characteristic features of Vadha karappan are itching, oozing, erythema, oedema, vesicles and papules. This disease more or less correlates with “Eczema” in modern medicine.

Causative factors

According to Siddhars view,it was stated rhat excessive intake of fish,mutton, allergic food like varagu, thinai, rhizomes and root tubers are the main causes for this disease.Anti social activities result in psuchic distrubances leading to this disease.

In Modern medicine etiology of eczema is due to hypersensistivity to contact allergens, irritants, family history and emotional factors.

This dissertation work includes literary collection of both siddha and modern aspects of this disease. For clinical study, 40 patients are chosen with clinical signs and symptoms of Vadha karappan and en vagai thervugal is done. 25 patients are treated as OP and 15 as IP cases.

On the day of enrolment,routine laboratory investigations,general and systemic investigations, Envagai thervu are noted. Indiviual case sheets are maintained for all cases.

On first day early morning, Kowsigar kulambu-160mg is prescribed to neutralise the mukkutram.

From second day onwards

Internal medicine

Amirtha kanthi kukkil valladhi– 500 mg (tds)

Ref: Agathiyar Vaithiya valladhi 600

External medicine:

Sivappu ennai**Ref: Sirappu Maruthuvam** are given All patients are advised to follow pathiyam,yogasanam, pranayamam and dhiyanam as supportive measures to relieve mental stress and strain. The observations are discussed as follows.

Sex distribution

In the study among the Forty cases, 30 were male and 10 were female. According to the **Siddha**literatures there is no apparent sex predilection in vatha karappan.

Age distribution

During this entire study, the prevalence of Vatha karappan was a very common one affecting the adult age group mainly above 50 years.

Occupational status

Occupational hazards play an important role in causing or aggravating the disease vatha karappan. This is almost true in the cases as their relevant occupational histories were drawn from all the patients. Patients exposed to allergens like mason, frames are more prone to get this disease.

Socio - economic condition

Out of Forty patients, thirty five were belonged to poor economic conditions. Majority of them were ignorant in personal hygiene.Malnutrition, prolonged &continuous exposure to polluted atmosphere, lowered immune responses made them prone to this type of disease.

Diet Reference

According to siddha literature, non-vegetarian diet accounts muchmore for the occurrence of the vadha karappan. Here during the study85% of patients were.non vegetarian Again some food stuff like raggi, bitter guard, brinjal, maize, tomato and fish items can also be causative factors for the vatha karappan. So they were advised to avoid such food items.

Mode of onset

During the study, 75% cases were observed to have a chronic onset. complete treatment, failure to follow medical advice and dietary restrictions, psychological strains and changed life style were observed to be the reasons for this disease to become chronic.

All precipitating factors are well observed during the studyas vatha karappan is one among the immunological disorders like Bronchial asthma, which may affect subsequent generations. Here positive family history was found in 4 cases. Occupational relevance was observed in 23 cases .

Incompatible diet in7 cases and atopy in6 cases were also noted.

Three dosha reference

a) Vatha reference

Abanan was affected in 18 cases (habitual constipation), Piranan was affected in 16 cases (Bronchial asthma). Devathathan was affected in cases. Viyanan and Samanan were affected in all 40 cases.

b) Pitha reference

Anarpitham was affected in 6 cases (loss of appetite, indigestion) Ranjagam was affected in 12 cases (low Hb level) Prasagam was affected in all 40 cases (due to dryness, roughness and hyper pigmentation of the skin).

Kabam reference

Out of 40 cases, Avalambagam affected in 10% (4 cases) and kilethagam in 15% (6 cases)

UDAL THATHUKAL

Saaram and seneer are affected in all 40 cases.

EN VAGAI THERVUGAL:-

According to this study, Naadi was effected in all the cases (100%), Naa was affected in 21 cases (52.5%) Sparism was affected in (100%) 40 cases.

LABORATORY INVESTIGATIONS:-

- Blood (TC, DC, ESR, Hb%, Sugar, Urea, Cholesterol)
- Urine (Albumin, Sugar, deposits) were done for all 40 cases.
- Anemia was (11 cases (27.5%). There were no remarkable changes in TC, DC and ESR.

Effect of therapy

On the basis of assessment of curative Effect of trial drugs

- Good result in 25 cases (62.5%)
- Better result in13 cases (32.5%)
- No improvement in 2 cases (5%)

The trial drugs showed **good** improvement in this disease.

SUMMARY

The disease Vadha karappan was comparatively studied with Eczema with reference to its etiology, pathogenesis and clinical features. This disease forms social stigma with recurrences and exacerbations. So the drug Amirtha Kandhi Kukkil Valladhi is chosen as internal medicine and Sivappu ennai as external medicine and clinical trial was done in Government Siddha Medical College, Palayamkottai. For this trail, 25 cases were selected in OPD and 15 cases in IPD. The pre clinical studies reveal that the drug ‘Amirtha kanthi kukki valladhi has

- Significant Acute Anti inflammatory action
- Moderate Anti Histaminic action
- Moderate analgesic action

Pharmacological analysis of Sivappu ennai has

- Moderate acute anti inflammatory action

Daily progress of the disease are noted from first week throughout the trial period results.

No adverse reaction were found. Hence the trial drug is safe and effective.

CONCLUSION

In this clinical study **“Amirtha kandhi kukkil Valladhi”** (Internal) and **“Sivappu ennai”** (External) are taken for treating the disease **‘Vadha karappan’**

In preclinical study, Pharmacological evaluation shows

- Significant anti inflammatory action
- Moderate anti histaminic action
- Moderate analgesic effect.

The overall result of efficacy of trial days by reduction of clinical signs and symptoms like itching, oozing, ulcers, papules were found to have marked effect in 62.5% ,moderate effect in 35%, no effect in 5% of cases.

- Based on clinical signs and symptoms Vadha karappan correlates with Eczema.
- Siddha diagnostic methods are established in this study.
- The trial drug doesn’t prevent the exacerbations of patients who have a constant exposure to allergens.
- The raw drugs are easily available and costs are economical. No adverse effects and side effects will found clinically for trial drugs.
- So the clinical effect of trial drug is found to be **good** in treating ‘Vadha karappan’.

ANNEXURE I

PREPARATION AND PROPERTIES OF TRIAL DRUG

Name of the medicine:AMIRTHA KANDHI KUKKIL VALLADHI

Ref:Agathiyar vaithiya valladhi-600

AMIRTHA KANDHI KUKKIL VALLADHI:

INGREDIENTS

Purified kandhagam (Sulphur)	-	280 gm
Purified kukkil (Commpihora mukul	-	140gm
Purified serankottai (Semecarpus anacardium)	-	140gm
Seenthil sarkarai (Tinospora cordifolia)	-	140gm
Purified ell (Sesamum indicum)	-	140gm
Purified amukura (Withania somnifera)	-	105gm
Purified parangipattai (Smilax chinensis)	-	105gm
Purified kodiveli verpattai (Plumbaga zeylanicum)	-	70gm
Vazzhiluvai arisi (Celastrus paniculatus)	-	35gm
Kottam (Costus species)	-	35gm
Valmilagu	-	35gm
Paereechu (Phoenix species)	-	35gm
Sadmanjil (Nardostacys jatamansi	-	35gm
Sivanarvembu (Indigofera asphalanthodies)	-	35gm
Vetti ver (Vettiveria zizhinodies	-	35gm
Vellarugu (Enicostemma axillare)	-	35gm
Sanganguppi (Clerodendron inerme)	-	35gm
Kadukkao thol (Terminalia chebula)	-	35gm
Thandrikkail (Terminalia bellerica)	-	35gm
Nellikai (Emblica officinalis)	-	35gm
Sirungapoo (Mesua nagassarrium)	-	35gm
Thakkolam (Illicium verum)	-	35gm
Seerakam (Cuminum cyminum)	-	35gm

Karboki (Psoralia corylifolia)	-	35gm
Karunjeerakam (Nigella sativa)	-	35gm
Thalisapathri (Taxus buccatum)	-	35gm
Nannari (Hemidesums indicus)	-	35gm
Nilappanai (Tribulus terestris)	-	35gm
Thannervittan kilangu (Asparagus racemosus)	-	35gm
Kothumalli (Coriandrum sativum)	-	35gm
Kalamatham (Asphaltum)	-	35gm
Kalnar (Asbestos)	-	35gm
Elam (Elettaria cardamomum)	-	35gm
Chuku (Zingiber officinale)	-	35gm
Milagu (Piper nigrum)	-	35gm
Thippilli (Piper longum)	-	35gm
Karuvappattai (Cinnamommum verum)	-	35gm
Chittrathai (Alpinia galanga)	-	35gm
Panai vellam (Palm jaggery)	-	1540 gm
Thean (Honey)	-	280gm

PURIFICATION OF DRUGS

Kandhakam: steamed with cow's urine by placing it underground. Then steaming process is repeated with each of onion, juice , Solanum nigrum juice , Amaranthus tricolor juice, Copper sulphate mixed with curd.

Kukkil: Fermented with neem bark decoction for three days and washed with cool water. Same is repeated with a mixture of butter milk, vinegar and lime juice. Then it is boiled with milk and fried with ghee.

Serankottai: Coated with lime stone and fried with vinegar

Parangipattai, Amukura, Kodiveli

Steamed with milk

All other drugs are cleaned and fried.

PREPARATION:

The ingredients (expect palm jaggerry and honey) are powdered and then ground with honey and palm jaggerry for 12 hours to a waxy consistency.

DOSE: (500-700mg)

SIVAPPU ENNAI:

Pungan ver (Pongamia glabra)	-	4kg
Thengai ennai (Cocos nucifera)	-	1kg
Manjity (Rubia cordifolia)	-	62gm
Nannari (Hemidesmus indicus)	-	62gm
Thenmelugu (Bees wax)	-	62 gm
Vellai kungilium (Shorea robusta)	-	52gm
Sural patai (Ventilago maderaspatana)	-	3gm
Sevallikodi (Dioscorea purpurea)	-	10gm

PREPARATION

Decoction is made with pungan ver and coconut oil is added to it and kept in fire. To, this manjisti and nannari are added as karkam and decoction in equal quantity. On boiling stage, add sural pattai and sevvalli kodi and wait for attaining melugu consistency. Filter the oil and add kungilum and thean melugu. This oil is cooled , strained and bottled up.

PROPERTIES OF TRIAL MEDICINE

AMIRTHA KANDHI KUKKIL VALLADHI

1.கந்தகம் (Sulphur):

Characters:சுவை :கசப்பு, துவர்ப்பு

TherapeuticActions:Laxative,Cholagogue,Antiseptic,Alterative,Diaphoretic

பொதுகுணம் :-

"நெல்லிக்காய்க் கந்திக்கு நீள்பதினென் குட்டமந்தம்
வல்லை கவிசை குன்ம வாயுகண்ணோய் - பொல்லா
விடக்கடிவன் மேகநோய் வீறுசுரம் பேதி
திடக்கிரக ணீகபம்போந் தேர்"

2. குக்குலு(Commiphora mukil -Burseraceae)

Parts used : Gum resin

Therapeutic uses :It has very good anti vatha property. It is a good aphrodisiac drug also.

Gugglu produces gum gugglu.The Extract of the gum called as guglulipid ,has been used in traditional medicines .

The active ingredient is gugglusterone, phytosterols, guglulipids.

- ❖ Guggul lipid stimulates the activity of WBC in building up immune system and expels toxins from body .

3. சேராங்கொட்டை (Semecarpus anacardium- Anacardiaceae)

Parts Used : Fruits and seeds

Therapeutical Actions **:** Alterative, Caustic

Chemical constituents : Anacardol,semecarpol,catechol,cordal,Bhilawanol, Anacardic acid .

பொதுகுணம்:

"சேங்கொட்டை மெய்த்திமிரைத்தீராக் கடிவிடத்தைப்
பங்கொட்டு மூலத்தைப் பற்றுக்கும் - ஆங்கெட்டிக்
கொல்லுமீவா நத்தினொரு குன்மத்தை யும்மதனை
வெல்லும் அயிற்கண்ணாய் விள்"

4. சீந்தில்(Tinospora cordifolia-Menispermaceae)

Parts used : Leaves, stem and rhizome

Therapeutic Actions:Alterative, Antiperiodic, Aphrodisiac, Demulcent, Stimulant, Stomachic, Tonic, Diuretic.

Chemicalconstituents:Sesquiterpeneglucoside,tinocordifolin,tinocordifolio side, cardioside,amritosides A,B,C,D.

சீந்தில் சர்க்கரை பொதுகுணம்:

"அமுதவல்லிக்கொடி யக்கார முண்டிடத்
திமிருறு மேகநோய்த் தீயெலா மாறுமெ".

5. **எள்(Source of Gingelly Oil)(Sesamum indicam-Pedaliaceae)**

Parts used : Leaves, flowers, fruits and seeds

Therapeutic actions: Demulcent, Laxative, Nutritive, Emollient

Chemical Constiuent : Sesamol,sesamolin,sesamin,EFA,omega 6 fatty acids

.

பொதுகுணம்:

"புத்தி நயனக் குளிர்ச்சி பூரிப்பு மெய்ப்புளகஞ்
சத்துவங் காந்தி தனியிளமை மெத்தவுண்டாங்
கண்ணோய் செவிநோய் கபால அழல் காசநோய்
புண்ணோய்போ மெண்ணெய்யாற் போற்று"

6. அமுக்கரா - (Withania somnifera- Solanaceae)

Part used: Dried root.

Therapeutic actions : Alterative, Aphrodisiac, Deobstruent, Diuretic, Tonic,Soporific, Sedative.

பொதுகுணம்:

"கொஞ்சந் துவர்ப்பாங் கொடியகயம் சூலையரி
மிஞ்சுகரப் பான்பாண்டு வெப்பதட்பு-விஞ்சி".

- அகத்தியர் குணவாடகம்

7. பறங்கிப்பட்டை (Smilax chinensis – Liliaceae)

Part used: bark

Therapeutic actions: Alterative, Antisyphilitic, Aphrodisiac, Depurative.

Chemical Constituents : Taxifolim -3-0-glycoside, Piceid, oxycesveratrol, engeletin, resveratrol and Scripusin A,Saponin, Smilaxin, Prosapogenin A, Dioscin, gracillin,methygracillin.

It has anti inflammatory ,antitumour and antibacterial activity .

பொதுகுணம்:

"தாகம் பலவாதஞ் தாதுநட்டம் புண்பிளவை
மேகங் கடிகிரந்தி வீழ்மூலந் - தேகமுடன்
குட்டை பகந்தமேற் கொள்வமனம் போம்பறங்கிப்
பட்டையினை யுச்சரித்துப் பார்"

8. கொடிவேலி (Plumbago zeylanica – Plumbaginaceae)

Part used: Root

பொதுகுணம்:

‘கட்டிவிர ணங்கிரந்தி கால்கள் அரையாப்புக்
கட்டிச்சூ லைவீக்கங் காழ்மூலம் - முட்டி ரத்தக்
கட்டுநீ ரேற்றங் கனத்த பெருவயிறும்
அட்டுங் கொடிவேலி யாம்”

9. வாலுளுவை (Celastrus paniculatus- Celastraceae)

Parts Used	:	Leaves, seeds
Therapeutic actions	**:**	Aphrodisiac, Stimulant, Alterative, Nervine tonic

10. கோட்டம்-(Costus species -Costaceae)

Part used	:	Root
Therapeutic Actions	**:**	Antidiabetic, anti lipidemic, anti oxidant, anti microbial

11. வால்மிளகு(Piper cubeba- Piperaceae)

Part used	:	Dried fruits (berries)
Therapeutic Actions	**:**	Stimulant,carminative,Diuretic, Expectorant

12. பேரிச்சங்காய்(Phoenix dactilifera- Arecaceae)

Part Used	:	fruit,seed,gum,sugar
Therapeutic Actions	**:**	Tonic, Nutritive, Demulcent, Laxative, Diuretic

13. சடாமாஞ்சில் (Nardostachys jatamansi- Valerianaceae)

Parts used	**:**	root
Therapeutic Actions	**:**	Stimulant, Diuretic, Antispasmodic , Expectorant

14. சிவனார் வேம்பு(Indigoferaaspalanthoides-Fabaceae)

Parts used	:	leaves, stem,flowers and root
Therapeutic actions	**:**	stimulant, demulcent.

15. வெட்டிவேர் (Vettiveria zizhinoides- Poaceae)

Part Used : Root

Therapeutic Actions **:** Tonic, Stimulant, Antispasmodic, Diuretic, Febrifuge.

16. வெள்ளறுகு (Enicostemma axillare – Gentianaceae)

Part used : whole plant

Therapeutic Actions : stomachic, tonic, Alterative, laxative, febrifuge.

17. சங்கன் (Azima tetracantha – Salvadoraceae)

Part used **:** Root

Therapeutic actions : diuretic, Stimulant, astringent, tonic, Antiperiodic.

18. சிறுநாகப்பூ (Mesua ferra- Calophyllaceae (Guttiferaceae))

Parts used : Leaves, bud, flower, seeds, root bark, etc

Therapeutic Actions **:** Astringent, carminative, Aromatic, Acrid, Purgative

19. தக்கோலம்:

Parts used **:** whole plant.

Therapeutic Actions **:** Antivatha ,Astringent, Febrifuge, Nutritive.

20. நற்சீரகம்(Cuminum cyminum- Umbelliferae)

Parts used **: seeds**

Therapeutic actions : Carminative, Stimulant, Stomachic, Astringent.

21. கார்போகரிசி (Psoralea corylifolia - Fabaceae.)

Part used **:**The dried fruit

Therapeutic actions : Laxative, Stimulant.

22. கருஞ்சீரகம் (Nigella sativa - Ranunculaceae)

Parts used: Seeds

Therapeutic actions: carminative, Diuretic, emmenagogue, galactogogue, anthelmintic, Stomachic, Parasiticide, Emollient.

23. தாளிசபத்திரி (Taxus buccata- Taxaceae)

Parts used **:** leaves

Therapeutic Actions : Stomachic, Carminative, Tonic, Expectorant.

24. நன்னாரி (Hemidesmus indicus- Apocynaceae)

Part used : root

Therapeutic actions **:** Alterative, Tonic, Demulcent, Diuretic, Diaphoretic

25. நெருஞ்சிமுள் (Tribulus terrestris- Zygophyllaccae)

Parts Used : Whole plant particularly fruit

Therapeutic Actions: Refrigerant,diuretic, Demulcent,Aphrodisiac,

26. நிலப்பனை (Curculigo orchioides- Hypoxidaccae)

Parts used : Rhizomes, roots

Therapeutic Actions: Tonic, Diuretic, Astringent, Carminative, Emollient

27. **தண்ணீர் விட்டான் (Asparagus racemosus- Liliaccae)**

Parts used : Leaves, Rhizomes

Therapeutic Actions: Nutritive, demulcent, Galactagogue, Aphrodisiac, Antispasmodic

28. மல்லி (Coriandrum sativum – Umbelliferae)

Parts used **: Seeds**

Therapeutic actions **:** Stomachic, Carminative, Stimulant, Diuretic.

29. ஏலக்காய்(Elettaria cardamonum- Zingiberaceae)

Part used **:** Seeds

Therapeutic actions: Stimulant, Carminative, Stomachic.

30. சுக்கு (Zingiber officinale – Zingiberaceae)

Part used **:**dry rhizome

Therapeutic actions **:** stimulant, Stomachic, Carminative.

31. மிளகு(Piper nigrum- Piperaceae)

Part used **:**The fully matured dry fruit

Therapeutic actions **:**Acrid, Carminative, Antiperiodic, Stimulant.

32. திப்பிலி (Piper longum – Piperaceae)

Part used **:**The fully matured dry fruit

Therapeutic actions **:** Stimulant, Carminative.

33. கருவாப்பட்டை(Cinnamomum Verum- Lauraceae)

Parts used : Bark

Therapeutic Actions **:** stimulant, Carminative, Aphrodisiac

34. சிற்றரத்தை (Alpinia calcarata- Zingiberaceae)

Part used : Rhizome

Therapeutic Actions **:** Expectorant, febrifuge, stomachic

35. பனங்கருப்பட்டி(பனை) (Borassus flabelliformis-Arecaceae)

Parts used **:** Palm jaggery

Therapeutic Actions **:**Astringent, Aphrodisiac, Diuretic, Demulcent, Nutrient, Refrigerant,Stimulant, Antiphlogistic

36. தேன் (Honey)

"அனுபான மாய்ப்பின் அவிழ்தமுமாய்த் தோன்றி
கனமான தேகநிலை காட்டிப்- பினுமே
யரசன் முதல்வோ ரையுமாட்டு வித்தாலே
பரசத் தினாற்போம் பிணி"

-தேரன் பொருட்பண்பு நூல்

தேன் உடலில் வாதம் முதலிய முக்குற்றங்களை போக்கி தேகத்தை நன்னிலையில் வைக்கும்.

37. கல்நார் (ASBESTOS)

Asbestos is a curious natural white rock consisting of calcium silicate. It is found in large quantities near the town of Mysore.

Therapeutic Actions: Diuretic, Astringent.

38. கல்மதம் (Asphaltum)

Synonyms **:**கோமூத்திர சிலாசத்து

கல்மதம் என்பது மலையினுடைய சத்தைக் குறிக்கும்.

SIVAPPU ENNAI

Ref:sirappu maruthuvam

1.Pungam ver

Botanical Name : Pongamia glabra

Family : Fabaceae

Part used : Root

வேறு பெயர் : புன்கு, பூந்தி, கரஞ்சகம், கரஞ்சம்

சுவை : கைப்பு, துவர்ப்பு

தன்மை : வெப்பம்

பிரிவு : கார்ப்பு

செய்கை

துவர்ப்பி-Astringent

உடற்தேற்றி-Alternative

தூக்குணப்புழுவகற்றி – Parasiticide

பொதுகுணம்:

"புங்கின்விதை காற்கிரந் புண்கரப்பான் காதெழுச்சி
அங்கசன்னி கண்ணோய்க்கும் ஆம்பேதி யுங்கட்டும்
காட்டுப்புங் கின்விதைக்கு கண்டதே மற்சொறிமேலப்
பூட்டுப்பங் கின்வாயவும் போம்"

Chemical constituents

Flavanoids - pongamones A-E ,Ovalichromane-B, pongachin, ponganone 5hydroxyfuranoflavin, karajin, pongapin, Ranjachromene, 5- methoxy pongapin

2.Coconut oil

Botanical name : Cocos nucifera

Family : Arecaceae

Part used : Whole plant

வேறுபெயர்: தென்னைமரம், பூலோக கற்பக விருட்சம், நாளிகேரம், தாழை,இலாங்கலி, புல்மரம்

சுவை- இனிப்பு

தன்மை- தட்பம்

பிரிவு- இனிப்பு

பொதுகுணம்:

"தேங்காயி னெய்யத்தான்ற றியால் வருபுண்போம்
பாங்காக்க கூந்தற் படர்ந்தேறு - நீங்காத
பல்லடியின் னோயும் படர்தாமரை சிரங்கும்
அல்லறம் போமென் றறி"

Chemical Constituents

Oil contain lauric, myristic, palmitic, stearic and carprilic acid

3.Bees wax- Cera wax

Action- **உள்ளழாலற்றி**

"அறைபக்க வாத மதைப்பைய மூதை
குறைவிந்தி தழ்நோய் தேள்கூறி - கறையைப்
புழுகிகெடுக்க வங்கமுறு புண்ணிடிப்புண் டீட்புண்
மெழு கெடுக்க வாங்கலும் மெய்"

மெழுகினால் பாரிசவாயு, வீக்கம், கபநோய், வாதம், சுக்கில நஷ்டம், சிலேஷ் மோஷ்டம் ரோகம், தேள்விடம், பைசாசம் குஷ்டம் விரணம் நீங்கும்.

4.Manjisti

Botanical Name	: Rubia cordifolia
Family	: Rubiaceae
Part used	: Root

Chemical constituents

Rubiadin, Rubicomaric acid and xantho purpurin, alizarin, purpurin, quinizarin Manjistin and chirstofin

5.Nannari

Botanical Name	: Hemidesmus indicus
Family	: Asclepiadaceae
Part used	: Root

பொதுகுணம்:

"சலதோடம் பித்தமதி தாகம் உழலை
சலமேறு சீதமினார்ச் தஞ்சூ - டுலகமதிற்
சொன்னமது மேகம் புண் சுரம்வையை லாமொழிக்கும்
மென்மதுர நன்னாரி வேர்"

Chemical constituents

Hemidesmol Hemidesterol, Saponins, pregnane, Denicunins, Hemidine, desinine, indincine, hemidin, hemdescine, emidine, medidesmine.

7.Kungilyam

Botanical Name : Shorea robusta

Family : Dipterocarpaceae

Part used : Resin

பொதுகுணம்:

"பெரும்பாடு மேகம்போம் பேரா துயில்
அரும்பிய புண் ணாறுமிவை யல்லால்- குரும்பால்
எலும்புருக்கி புண்சீழும் ஏகும் உலகில்
சலம்பபருங் குங்கிலியத் தால்"

Chemical constituents

Urrsolic acid, Mangi feronic acid .Benethamic acid asiatic acid. α amyerone and avoal compounds

Action : Aphrodriac, Demutent, Anti-reader.

8.சுருள்பட்டை

Botanical Name : Ventilago maderaspatana

Family : Rhamnaceae

Part and used : Bark

Action : Astringent , Thermogenic
Used in Skin disease.

9.Sevvalli kodi

Botanical Name : Diascorea purpurea

Family : Nymphyaceae

பொதுகுணம்:

"செவ்வல்லி பூவுக்குச் சேர்த்ததிறங்கு நீர்ப்பிணியோ
டொவ்வுமே கப்பிணியும் ஓய்வதன்றி- இவ்வுலகிற்
கண்ணின்நோய் தீரும் கனத்தபித்த ரத்தமொடு
புண்ணின் நோய் பன்னோயும் போம்".

ANNEXURE II

BIO-CHEMICAL ANALYSIS OF AMIRTHA KANDHI KUKKIL VALLADHI

PREPARATION OF THE EXTRACT

5gm of the drug was weighed accurately and placed in a 250 ml clean beaker. Then 50ml of distilled water is added and dissolved well. Then it is boiled well for about 10 minutes. It is cooled and filtered in a 100ml volumetric flask and then it is makeup to 100 ml with distilled water. This fluid is taken for analysis.

QUALITATIVE ANALYSIS

S. NO	EXPERIMENT	OBSERVATION	INFERENCE
1	**TEST FOR CALCIUM:** 2ml of the above prepared extract is taken in a clean test tube. To this add 2ml of 4% Ammonium oxalate solution	A white precipitate is formed	Indicates the presence of Calcium
2	**TEST FOR SULPHATE:** 2ml of the extract is added to 5% barium chloride solution.	No white precipitate is formed	Absence of Sulphate
3	**TEST FOR CHLORIDE:** The extract is treated with silver nitrate solution	No white precipitate is formed	Absence of chloride
4	**TEST FOR CARBONATE:** The substance is treated with concentrated HCl.	No brisk effervescence is formed	Absence of carbonate
5	**TEST FOR STARCH:** The extract is added with weak iodine solution.	Blue colour is formed	Indicates the presence of Starch
6	**TEST FOR IRON FERRIC:** The extract is acidified with Glacial acetic acid and potassium ferro cyanide.	No blue colour is formed	Absence of ferric Iron

7	**TEST OF IRON FERROUS:** The extract is treated with concentrated Nitric acid and ammonium thiocyanate solution.	Blood red colour is formed	Indicates the presence of ferrous Iron
8	**TEST FOR PHOSPHATE:** The extract is treated with ammonium Molybdate and concentrated nitric acid.	No Yellow precipitate is formed	Absence of Phosphate
9	**TEST FOR ALBUMIN:** The extract is treated with Esbach's reagent.	No yellow precipitate is formed	Absence of Albumin
10	**TEST FOR TANNIC ACID:** The extract is treated with ferric chloride.	Blue black precipitate is formed	Indicates the presence of Tannic acid
11	**TEST FOR UNSATURATION:** Potassium permanganate solution is added to the extract.	It gets decolourised	Indicates the presence of unsaturated compound
12	**TEST FOR THE REDUCING SUGAR:** 5ml of Benedict's quantitative solution is taken in a test tube and allowed to boil for 2 minutes and to this add 8-10 drops of the extract and again boil it for 2minutes.	Colour change occurs	Indicates the presence of Reducingsugar
13	**TEST FOR AMINO ACID:** One or two drops of the extract is placed on a filter paper and dried it well. After drying, 1% Ninhydrin is sprayed over the same and dried it well.	Violet colour is formed	Indicates the presence of Amino acid
14	**TEST FOR ZINC:** The extract is treated with potassium Ferrocyanide.	No white precipitate is formed	Absence of zinc

This drug contains

- Calcium
- Starch
- Ferrous iron
- Tannic acid
- Unsaturated compound
- Reducing sugar
- Amino acid

ANNEXURE - III

PHARMACOLOGICAL STUDIES

ANTI - HISTAMINIC STUDY OF AMIRTHA KANDHI KUKKIL VALLADHI

Aim:

To study the Anti-histaminic effect of **Amirtha kandhi kukkil valladhi**

Preparation of the test drug:

l gm of **Amirtha kandhi kukkil valladhi** was boiled with 20 ml of water for 15 minutes. 2ml of decoction was taken as the test drug.

Procedure:

A guinea pig weighed about 350gms was starved for 48 hours. It was sacrificed by a blow on the head and external jugular vein was allowed to bleed. The abdomen was then cut and ileum was cut out and placed in a tray, which contained warm tyrode solution (37° C) and continuously aerated. The contents of the lumen of the ileum were washed and care was taken to avoid any damage to the gut muscle. An ileum segment having a length of about 3cm. was taken and tied in both ends with thread. The tissue was put in an organ bath and the effects of drug on histamine-inducedcontractions were recorded.

Inference:

The drug Amirtha kandhi kukkil valladhi has **Moderate** anti histamine action.

ACUTE ANTI-INFLAMMATORY STUDY ON

AMIRTHA KANDHI KUKKIL VALLADHI

Aim:

To study the acute anti-inflammatory effect of **Amirtha kandhi kukkil valladhi** by Carrageenin induced hindpaw method in Albino rats.

Materials and Methods:

Drug Preparation:

1 gms of Amirtha kandhi kukkil valladhi was suspended in 10ml of distilled water with gum acacia as suspending agent.

Carrageenin induced Hind Paw Method:

Six healthy albino rats weighing 80-100 gm were selected. The volume of each hind paw was measured by using the mercury - plethysmograph.

After the measurement of hind paw of all the rats, they were divided into three groups each containing two rats.

First group was kept as control by giving distilled water 2ml/100 gm of body weight. The second group was given Ibuprofen 20mg/100gm body weight and kept as standard. Third group was given test drug Amirtha kandhi kukkil valladhi 200mg/l00gm body weight.

The drugs were administered orally. One hour after the drug administration, 0.1ml l% (w/v) of carrageenin suspension in water was injected in the plantar surface of Hind paw of all rats.

Three hour after carrageenin injection the hind paw volume was measured once again. From the differences in the initial and final hind

paw volume, the degree of the inflammation was calculated by taking the volume in the untreated control group as 100%.

The percentage of inflammation of the other group was calculated.

Results:

The details of the experimental results shown in the table.

EFFECT OF AMIRTHA KANDHI KUKKIL VALLADHI

Group	**Drugs**	**Dose/100gm of body weight**	**Initial Value**	**Final Value**	**Mean Difference**	**% Inflam-mation**	% **Inhibition**
Control	Water	2ml	0.55	1.45	0.9	100.00	-
Standard	Ibubrufen	20mg	0.55	0.75	0.20	22.2	77.8
Test drug	Amirtha kandhi kukkil valladhi	100mg	0.55	0.85	0.35	38.8	61.2

Inference:

The test drug has **Significant** Amirtha kandhi kukkil valladhi acute anti inflammatory effect.

ANALGESIC STUDY ON AMIRTHA KANDHI KUKKIL VALLADHI

Aim:

To study the analgesic effect of **Amirtha kandhi kukkil valladhi** on albino rats by tail flick method.

Materials and Methods: Preparation of the test drug:

1 gm of Amirtha kandhi kukkil valladhi was suspended in 10ml of distilled water withgum acacia as suspending agent. This 2 ml contained 100 mg of the test drug.

Equipment:

Hot water bath.

Procedure:

Six male albino rats (weighing 80-100gms) were used in three groups. The animals were allowed to free access to food and water until they brought to the experiment. The animals, which showed the positive response to the stimulus within agiven time, were selected for the study.

After the selection of animals, which were responding to stimulus within 2 seconds, they were divided into 3 groups, each group consisting of 2 rats.

The hot water was maintained at 55°C .The tip of the tail was immersed into the water bath and time was noted when rat flicked the tail.

First group was given the dose of 200mg/100gm body weight of the animal. Second group was administrated with paracetamol at a dose

of 20mg/100gm of body weight. Third group was given Amirtha kandhi kukkil valladhi to the 200mg/1ml of water and kept as control.

After the drug administration, the reaction time of each rat after halfan hour , 1 hour and 1½ hour were noted in each group (When a rat fails to flick the tail, it should not be continued beyond 8 seconds to avoid injury) and the average was calculated.

The results of control group, standard group and drug treated group were tabulated and compared.

EFFECT OF AMIRTHA KANDHI KUKKIL VALLADHI

Serial No	**Group**	**Name of Drugs**	**Dose / 100 gram body weight**	**Initial Reading In Seconds**	**After Drug Administration**		
					½ hr Average	**1 hr average**	**Mean difference**
1.	Control	Water	2 ml	2	20	2	2
2.	Standard	Paracetamol	20mg	2	4.5	6.5	6.5
3.	Test drug	Amirtha kandhi kukkil valladhi	100	2	3	4	4

Inference:

The test drug Amirtha kandhi kukkil valladhi has **Moderate** analgesic action.

ACUTE ANTI-INFLAMMATORY STUDY ON

SIVAPPU ENNAI (Externally)

BY HINDPAW METHOD IN ALBINO RATS

Procedure:

Anti-inflammatory study of SIVAPPU ENNAI was studied in healthy albino rats.

Six rats were selected and divided into three groups. To the first group distilled water was given and kept as control. The second group was given the standard drug Ibuprofen at a dose of 20mg / 100 gm body weight. The third group was treated with the test drug externally. Before the application of the drug the hind paw volume of all rats was measured. This was done by dipping the hind paw upto the tibio dorsal junction in a mercury plethysmography. Subcutaneous injection of 0.1 ml of 1% w/v carrageenin in water was made into plantar surface of both the hind paw of each rat. Three hours after injection, the hind paw volume was measured once again. The difference between the initial and final volume would show the amount of inflammation.

Taking the volume in the control group as 100% of inflammation, the inflammatory or anti-inflammatory effect of the test group is calculated.

EFFECT OF SIVAPPU ENNAI

Group	**Drugs**	**Dose/100gm of body weight**	**Initial Value**	**Final Value**	**Mean Difference**	**% Inflam-mation**	% **Inhibition**
Control	Water	2 ml	0.55	1.4	0.85	100.00	-
Standard	Ibubrufen	20mg/ 1 ml	0.55	0.75	0.20	23.5	76.5
Test drug	Sivappu ennai	External	0.55	0.95	0.40	47	53

Inference:

It is absorbed that SIVAPPU ENNAI has **Moderate** acute anti inflammatory action.

GOVT. SIDDHA MEDICAL COLLEGE
PALAYAMKOTTAI
TIRUNELVELI- 627002.

SCREENING COMMITTEE

Candidate Reg No : 32102006

This is to certify that the dissertation topic VIRANAM and the drugs KUKKIL CHOORNAM and VIRANA SANJEEVI THYLAM have been approved by the screening committee.

S.No	Name	Signature
1.	Prof. Dr.N.Chandramohan Doss M.D(s) Principal & chairman.	
2.	Prof. Dr. R.Thangamoney M.D(s)	
3.	Dr.A.Subramanian M.D(s)	

(Kindly make sure that the minutes of the meeting duly signed by all the participation are maintained by the college office.)

ANNEXURE – IV

ASSESSMENT FORM

FORM l - SCREENING & SELECTION PROFORMA

FORM l A - HISTORY PROFORMA ON ENROLLMENT

FORM ll - CLINICAL ASSESSMENT ON ENROLLMENT

FORM ll A - CLINICAL ASSESSMENT DURING & AFTER TRIAL

FORM lll - LABORATORY INVESTIGATION ON ENROLLMENT & CONCLUSION OF TRIAL

FORM IV - CONSENT FORM

FORM IV A - WITHDRAWAL FORM

FORM IV B - DRUG COMPLIANCE FORM

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FORM l - SCREENING & SELECTION PROFORMA

1. **OP /IP NO:**
2. **NAME:**
3. **RELIGION: H / C / M / O**
4. **AGE/GENDER:**
5. **OCCUPATION:**
6. **INCOME:**
7. **CONTACT NUM:**
8. **INCLUSION CRITERIA**

- Age :15-70 yrs
- Sex : Both male and female
- Willing to give specimen of blood for the investigation whenever required.

- Willing for admission and study in IPD for 40 days or willing to attend OPD

9. EXCLUSION CRITERIA:

- Age below 15 and above 70
- Pregnant and lactating women
- Other than Eczema
- STD
- HIV

ADMITTED TO TRAIL:

If Yes Serial NO: **YES** **NO**

Date:

Station:

Signature of the Investigator:

Signature of the Lecturer: **Signature of the HOD**

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FORM l A -HISTORY PROFORMA

1. **SI NO:**
2. **OP /IP NO:**
3. **NAME :**
4. **RELIGION : H / C / M / O**
5. **AGE/GENDER:**
6. **OCCUPATION:**
7. **INCOME.:**
8. **CONTACT NUM:**
9. **MARITAL STATUS:** Married/Unmarried
10. **COMPLAINTS & DURATION:**

11. PERSONAL HISTORY:

PERSONAL HABITS	YES	NO	IF YES SPECIFY DURATION
Smoking			
Tobacco Chewing			
Alcohol			
Narcotic Drug Addiction			

12. DRUG HISTORY: Whether the Patient has underwent any allopathic Treatment Yes/No,

If yes specify the nature of the drug and treatment duration ……..

13. FAMILY HISTORY:

Whether this problem runs in family?

1. Yes 2.No

If yes, mention the relationship of affected person(s)

1._____

2._____

14.DIETARY HABITS

1.Pure vegetarian ☐

2.Non-Vegetarian ☐

Date:

Station:

Signature of the Investigator:

Signature of the Lecturer: **Signature of the HOD**

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FORM II AND II-A CLINICAL ASSESSMENT ON ENROLLMENT AND ON VISITS

1. **OP/ IP No:**
2. **BED No:**
3. **Sl. No:**
4. **NAME:**
5. **AGE:**
6. **GENDER:**
7. **OCCUPATION:**
8. **SOCIAL STATUS:**
9. **DATE OF ADMISSION:**
10. **DATE OF DISCHARGE:**
11. **POSTAL ADDRESS:**
12. **COMPLAINTS & DURATION:**
13. **HISTORY OF PRESENT ILLNESS:**

14. PAST HISTORY:

15. FAMILY HISTORY:

16. MENSTRUAL HISTORY (If applicable):

17. HABITS:

1. Smoker
2. Alcoholic
3. tobbaco chewer
4. betel nut chewer
5. Non-Vegetarian
6. Drug addiction

18. GENERAL EXAMINATION:

1. Body weight [Kg]
2. Height [cm]
3. Body Temperature [F]
4. Blood Pressure (mmHg)
5. Pulse Rate /min.
6. Heart Rate /min.
7. Respiratory Rate /min.
8. Pallor
9. Jaundice
10. Clubbing
11. Cyanosis
12. Pedal Oedema
13. Lymphadenopathy
14. Jugular venous pulsation

19. CLINICAL EXAMINATION:

I.INSPECTION:

- Size
- Shape
- Colour
- Border
- Edge
- Margin
- Discharge

II.PALPATION

- Tenderness
- Edge and margin
- Surface

III. CLINICAL ASSESSMENT:

- Erythema
- Oozing
- Itching
- Vesicles
- Pustules

20. EXAMINATION OF OTHER SYSTEMS:

1. CVS
2. RS
3. CNS
4. ABDOMEN
5. GENITO-URINARY

EXAMINATION - SIDDHA ASPECTS

1 . NILAM:

1. Kurinji 2. Mullai 3. Marutham 4. Neithal 5. Paalai

2 . KAALAM:

1. Kaar Kaalam 2. Koothir Kaalam 3. Munpani Kaalam

4. Pinpani Kaalam 5. Ilavenir Kaalam 6. Muduvenir Kaalam

3. YAAKKAI:

1. Vatham 2. Pitham 3. Kabam

4. Vathapitham 5. Pithavatham 6. Kabavatham

7. Vathakabam 8. Pithakabam 9. Kabapitham

4. GUNAM:

1. Sathuvam 2. Rasatham 3. Thamasam

5. KANMENDHIRIUM / KANMAVIDAYAM

1. Kai
2. Kaal
3. Vaai
4. Eruvaai
5. Karuvaai

6. UYIR THATHUKKAL:

I. VATHAM:

1. Piraanan
2. Abaanan
3. Viyaanan

4. Uthaanan
5. Samaanan
6. Naagan
7. Koorman
8. Kirukaran
9. Devathathan
10. Dhananjeyan

II. PITHAM :

1. Analam
2. Ranjagam
3. Saathagam
4. Aalosagam
5. Praasagam

III. KABAM:

1. Avalambagam
2. Kilethagam
3. Pothagam
4. Tharpagam
5. Santhigam

7. UDAL THAATHUKKAL:

1. Saaram
2. Senneer
3. Oon
4. Kozhuppu
5. Enbu

6. Moolai

7. Sukkilam / Suronitham

8. ENVAGAI THERVUGAL:

1. Naadi
2. Sparisam
3. Naa
4. Niram
5. Mozhi
6. Vizhi
7. Malam

Niram: Thanmai: Irugal: Ilagal :

8**.** Moothiram:

I. NEERKURI:

a. Niram

b. Manam

c. Edai

d. Nurai

e. Enjal

II. NEIKURI:

Vatha Neer Pitha Neer Kaba Neer

Date:

Station:

Signature of the Investigator:

Signature of the Lecturer: **Signature of the HOD**

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FORM lll - LABORATORY INVESTIGATION

INVESTIGATION:

I.BLOOD:

1. TC : (Cells/Cumm)
2. DC (%): N L M E
3. ESR (mm) : ½ hr ,1 hr
4. Hb:
5. Blood Sugar: a) Fasting b) Post Prandial c) Random
6. Total RBC count
7. Serum cholesterol
8. Blood urea
9. Serum creatinine

2.URINE:

- Albumin
- Sugar
- Deposits

II. SPECIFIC INVESTIGATIONS

1. Skin scrapping test for fungus
2. Bacterialand viral swab for microscophy and culture
3. Patch and prick test
4. Specific IgE test

Date: Station:

Signature of the Investigator:

Signature of the Lecturer: **Signature of the HOD**

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FORM IV A - CONSENT FORM

CERTIFICATE BY INVESTIGATOR

I certify that I have disclosed all the details about the study in the terms readily understood by the patient.

Signature……
Date……

Name……

CONSENT BY PATIENT

I have been informed to my satisfaction, by attending physician, the purpose of the clinical trial, and the nature of drug treatment and follow-up including the laboratory investigations to be performed to monitor and safeguard my body functions.

I am aware of my right to opt out of the trial at any time during the course of the trial without having to give the reasons for doing so.

I exercising my free power of choice, hereby give my consent to be included as a subject in the clinical trial of 'AMIRTHA KANDHI KUKKIL VALLADHI (INTERNAL) AND SIVAPPU ENNAI (EXTERNAL) in Vathakarappan (Eczema).

Place: Signature

Date: Name

Witness

அரசினர் சித்த மருத்துவக் கல்லூரி மற்றும் மருத்துவமனை

பாளையங்கோட்டை

பட்டமேற்படிப்பு சிறப்புமருத்துவத்துறை

"அமிர்த கந்தி குக்கில் வல்லாதி " (உள்மருந்து) மற்றும் "சிவப்பு எண்ணெய்" (வெளிமருந்து) இவற்றின் பரிகரிப்புத்திறனைக் கண்டறியும் மருத்துவ ஆய்வுஒப்புதல் படிவம் ஆய்வாளரால் சான்றளிக்கப்பட்டது

நான் இந்த ஆய்வைக் குறித்த அனைத்து விபரங்களையும் நோயாளிக்கு புரியும் வகையில் எடுத்துரைத்தேன் என உறுதியளிக்கிறேன்.

தேதி: கையொப்பம்:

இடம்: பெயர்:

நோயாளியின் ஒப்புதல்

என்னிடம் இந்த மருத்துவ ஆய்வின் காரணத்தையும் மருந்தின் தன்மை மற்றும் மருத்துவ வழிமுறையைப் பற்றியும் தொடர்ந்து எனது உடல் இயக்கத்தை கண்காணிக்கவும், அதனைப் பாதுகாக்கவும் பயன்படும் மருத்துவ ஆய்வுக்கூட பரிசோதனைகள் பற்றியும் திருப்தி அளிக்கும் வகையில் ஆய்வு மருத்துவரால் விளக்கிக் கூறப்பட்டது.

நான் இந்த மருத்துவ ஆய்வின் போது காரணம் எதுவும் கூறாமல் எப்பொழுது வேண்டுமானாலும் இந்த ஆய்விலிருந்து என்னை விடுவித்துக் கொள்ளும் உரிமையை தெரிந்திருக்கின்றேன்.

நான் என்னுடைய சுதந்திரமாகத் தேர்வு செய்யும் உரிமையைக் கொண்டு **வாதகரப்பான்** என்னும் நோய்க்கான **"அமிர்த கந்தி குக்கில் வல்லாதி " (உள்மருந்து) மற்றும் "சிவப்பு எண்ணெய்" (வெளிமருந்து) இவற்றின்** பரிகரிப்புத் திறனைக் கண்டறியும் மருத்துவ ஆய்விற்கு என்னை உட்படுத்த ஒப்புதல் அளிக்கிறேன்.

தேதி: கையொப்பம்:

இடம்: பெயர்:

சாட்சிக்காரர் கையொப்பம்:

பெயர்:

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FORM IV B - WITHDRAWAL FORM

1. SI NO:

2. OP /IP NO:

3. NAME:

4. RELIGION : H / C / M / O

5. AGE/GENDER:

6. OCCUPATION:

7. SOCIAL STATUS:

8. CONTACT NUM:

9. DATE OF TRIAL COMMENCEMENT:

10. DATE OF WITHDRAWAL FROM TRIAL:

11. REASONS FOR WITHDRAWAL:

Long absence at reporting: Yes/ No

- Irregular treatment: Yes/ No
- Shift of locality : Yes/ No
- Increase in severity of symptoms: Yes/ No
- Development of severe adverse drug reactions: Yes/ No

Date:

Station:

Signature of the Investigator:

Signature of the Lecturer: **Signature of the HOD**

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FORM IV C - DRUG COMPLIANCE FORM

Name of the Drug: **AMIRTHA KANDHI KUKKIL VALLADHI (INTERNAL) AND SIVAPPU ENNAI (EXTERNAL) IN VATHA KARAPPAN (ECZEMA) Drugs issued** : (Mgs/Grams)

Drugs returned : (Mgs/Grams)

S.NO	DATE	DRUG TAKEN TIME	
		MORNING/TIME	EVENING/TIME
Day 1			
Day 2			
Day 3			
Day 4			
Day 5			
Day 6			
Day 7			
Upto 48 Days			

After 7 days medicine 5 days resting period will be given to the patients.

Date:

Station:

Signature of the Investigator:

Signature of the Lecturer:

Signature of the HOD

BIBLIOGRAPHY

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- அகத்தியர் பதார்த்த குணசிந்தாமணி
- செகராச சேகர வைத்தியம்
- அகத்தியர் ஆயுள் வேதம்-1200
- அகத்தியர் விரண நூல்
- அகத்தியர் வைத்திய வல்லாதி 600
- அகத்தியர்அட்டவணை வாகடம்-திரு.க.அரங்கராசன் BIM.,
- நோய் நாடல் நோய் முதல் நாடல் பாகம் I- மரு. சண்முகவேலு
- சித்த மருத்துவம் சிறப்பு- மரு.ஆர்.தியாகராஜன் LIM.,
- குணபாடம் மூலிகை வகுப்பு -மரு.ஆர்.தியாகராஜன் LIM.,
- மருத்துவ தாவரவியல் ஆசிரியர்- Dr.S.Somasundaram M.Sc., Ph.d.,
- குணபாடம் தாது ஜீவ வகுப்பு - மரு.மு.முருகேச முருகேச முதலியார்
- Taxonomy of Angiosperms- Dr.S.Somasundaram M.Sc., Ph.d.,
- Tamilnadu medicinal plants-MR.S.N.Yoganarashimhan
- The wealth of India
- Indian material medica-DR.K.N.Nadkarani
- Text book of Microbiology-Anantha Narayanan and Paniker
- Davidson’s principle and practice
- Robinson’s pathology
- Roxburg’s common skin disease-Kirby
- Practice of dermatology-P.N.Bhel
- www.medscape.com
- www.medicine net.com
- www.wikipedia.org

OP No : 69372 Name : Kasi Thangam Age : 60 Female

Before Treatment

After Treatment

OP NO : 64243 Name : Sankaran Age : 60 Male

Before Treatment

After Treatment

சுருள்பட்டை

மஞ்சிட்டி

சுருள்பட்டை

மஞ்சிட்டி

தேங்காய் எண்ணெய்

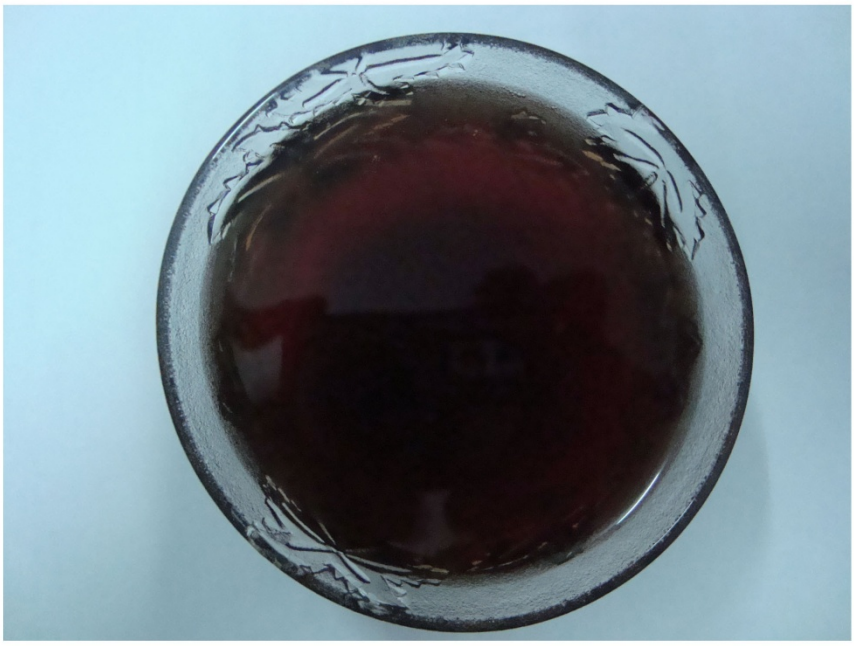
புங்க வேர்

நன்னாரி

செவ்வல்லி கொடி

வெள்ளை குங்கிலியம்

தேன்மெழுகு



சிவப்பு எண்ணெய்

IP No : 3896 Name : Saroja Age : 35 Female

Before Treatment

After Treatment

அமிர்த கந்தி குக்கில் வல்லாதி

தான்றிக்காய்

கொடிவேலி வேர்ப்பட்டை

வாலுளுவை

சிறுநாகப்பூ

எள்ளு

வால்மிளகு

சுக்கு

கல்மதம்

சேராங்கொட்டை

அமுக்கரா

எட்டி விதை

தண்ணீர்விட்டான்

திப்பிலி

கல்நார்

கருஞ்சீரகம்

சிற்றரத்தை

நெருஞ்சில் முள்

நிலப்பனை கிழங்கு

ஏலரிசி

பறங்கிப்பட்டை

பேரிச்சங்காய்

கோஷ்டம்

மிளகு

சீரகம்

சங்கன்குப்பி

சிவனார்வேம்பு

வெட்டிவேர்

தாளிசபத்திரி

சடாமாஞ்சில்

கருவாப்பட்டை

நன்னாரி

நெல்லிவற்றல்

கடுக்காய்

கார்போகரிசி

குங்கிலியம்

கந்தகம்

வெள்ளருக்கு

தக்கோலம்

தேன்

சீந்தில் சர்க்கரை

பூண்டு

பனைவெல்லம்

கொத்தமல்லி

நல்லெண்ணெய்

ஆயில்பட்டை

அமிர்த கந்தி குக்கில் வல்லாதி மெழுகு

INSTITUTIONAL ETHICS COMMITTEE (I.E.C)
GOVERNMENT SIDDHA MEDICAL COLLEGE
PALAYAMKOTTAI

No.....8...../IEC/GSMC/2011-12 DT.....6.6.12.

CERTIFICATE

This to certify that the project title A STUDY ON VADHA KARAPPAN - DISSERTATION FOR THE PARTIAL FULFILMENT FOR THE AWARD OF DEGREE OF DOCTOR OF MEDICINE BY Dr. P. SRIDEVI BRANCH - II SIRAPPU MARUTHUVAM ; REG. No - 32102010 - 2010 – 2013

has been approved by the IEC on condition basis.

Name of Member secretary

Dr.R.KAMALAM.,M.D.(S)

6/6/12.

Signature with date

(Kindly make sure that minutes of the meeting duly signed by all the participants are maintained by office)